

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
HAZARDOUS WASTE MANAGEMENT PERMIT**

Name of Permittee: Tradebe Treatment and Recycling, LLC

Facility Location: 4343 Kennedy Avenue, East Chicago, Indiana

EPA Identification Number: IND000646943

Issuance Date: December 8, 2011

Expiration Date: December 30, 2016

Authorized Activities

Pursuant to Indiana Environmental Statutes (IC 13) and the rules promulgated thereunder and codified in Title 329 of the Indiana Administrative Code, Article 3.1 (329 IAC 3.1), the State permit conditions (hereinafter called the permit) of the Resource Conservation and Recovery Act of 1976 (RCRA) permit are issued to Tradebe Treatment and Recycling, LLC (hereinafter called the Permittee or Tradebe) to operate a hazardous waste facility located in East Chicago, Indiana, Section 28, Township 37 North, Range 9 West at latitude 41° 38' N and longitude 87° W, Whiting Quadrangle, on the U.S. Geological Survey topographic map.

The State RCRA program is authorized under 40 CFR Part 271 and Section 3006 of RCRA to administer the hazardous waste management program in lieu of the Federal program, including administration of most of the Hazardous and Solid Waste Amendments (HSWA) of 1984. Since the State of Indiana has not yet received authorization to administer the most recent hazardous waste program requirements under HSWA, additional permit conditions may be issued by the U.S. EPA to address these new requirements.

The Permittee is authorized to conduct the following hazardous waste management activities:

	STORAGE		TREATMENT		DISPOSAL
X	Container	X	Tank		Injection Well
X	Tanks		Surface Impoundments		Landfill
	Waste Pile		Incinerator		Land Application
	Surface Impoundment	X	Other		

Federal regulations 40 CFR Parts 260 through 270 have been incorporated by reference. Where exceptions to incorporated Federal regulations are necessary, these exceptions will be noted in the text of the State rule. 329 IAC 3.1-1-7

The conditions of this permit were developed in accordance with the following applicable provisions of 329 IAC 3.1:

ID & Listing of Hazardous Waste

329 IAC 3.1-6

40 CFR 261 Subparts A, B, C, D, and
Appendices I, II, III, VII, VIII, IX, X

**Standards for Owners and Operators of
Treatment, Storage, and Disposal Facilities**

329 IAC 3.1-9

40 CFR 264 Subparts A, B, C, D, and E

Closure and Post-Closure

329 IAC 3.1-9

40 CFR 264 Subpart G

Financial Requirements

329 IAC 3.1-15

Use and Management of Containers

329 IAC 3.1-9

40 CFR 264 Subpart I

Tank Systems
329 IAC 3.1-9
40 CFR 264 Subpart J

Corrective Action for Solid
Waste Management Units
329 IAC 3.1-9
40 CFR 264 Subpart S

Air Emission Standards for
Process Vents
329 IAC 3.1-9
40 CFR 264 Subpart AA

Air Emission Standards for
Equipment Leaks
329 IAC 3.1-9
40 CFR 264 Subpart BB

Air Emission Standards for Tanks
Surface Impoundments and Containers
329 IAC 3.1-9
40 CFR 264 Subpart CC

Hazardous Waste Permit Programs
329 IAC 3.1-13
40 CFR 270 Subparts A, B, C, and D

Inspection and Investigation
329 IAC 3.1-1-3 and 329 IAC 3.1-1-4

Enforcement
329 IAC 3.1-1-5

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any Attachments) and the applicable rules and requirements contained in 329 IAC 3.1 and 40 CFR 260 through 270 as specified in the permit. Applicable rules are those which are in effect on the date of issuance of this permit. (See 329 IAC 3.1-13; 40 CFR 270.32)

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated April 22, 2011, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility has been or will be constructed and/or operated as specified in the application. Any inaccuracies found in the application may be grounds for the modification, revocation and reissuance, or termination of this permit (329 IAC 3.1-13-7), and potential enforcement action. The Permittee must inform the Indiana Department of Environmental Management (IDEM) of any deviation from, or changes in, the information in the application which would affect the Permittee's ability to comply with the applicable rules or permit conditions.

Pursuant to IC 13-15-5-3 and IC 4-21.5-3-5(f), this permit takes effect fifteen (15) days from receipt of this notice. If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a Petition for Administrative Review. If you seek to have the effectiveness of the permit stayed during administrative review, you must also file a Petition for Stay. The petition(s) must be submitted to the Office of Environmental Adjudication, Government Center North, Room 501, 100 North Senate Avenue, Indianapolis, Indiana 46204, within fifteen (15) days after your receipt of this notice. The petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 requires that a Petition for Administrative Review must include:

1. The name and address of the person making the request.
2. The interest of the person making the request.
3. Identification of any persons represented by the person making the request.
4. The reasons, with particularity, for the request.

5. The issues, with particularity, proposed for consideration at the hearing.
6. Identification of the terms of the permit which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing licenses of the type granted or denied by the Commissioner.

Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the Office of Environmental Adjudication. Filing of such a document is complete on the earliest of the following dates:

1. the date on which the petition is delivered to the Office of Environmental Adjudication, Government Center North, Room 501, 100 North Senate Avenue, Indianapolis, Indiana 46204;
2. the date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

The portions of the permit for which a Petition for Stay has been filed will take effect at the expiration of the additional fifteen (15) day period unless or until an Environmental Law Judge stays the permit in whole or in part. This permit shall remain in effect until five (5) years from the effective date unless revoked and reissued, modified, or terminated (329 IAC 3.1-13-7), or continued in accordance with IC 13-15-6-3.

This permit terminates and supersedes any other State hazardous waste management permit.

Issued this 8th day of December, 2011.

By:


Jeffrey L. Sewell, Chief
Permits Branch
Office of Land Quality

Tradebe Treatment and Recycling
East Chicago, Indiana
EPA ID# IND000646943

TABLE OF CONTENTS

Page

Permit Form

Permit Conditions

I.	Standard Conditions.....	7
II.	General Facility Conditions.....	17
III.	Container Storage and Treatment Conditions.....	23
IV.	Tank Storage and Treatment Conditions.....	28
V.	Air Emission Conditions.....	36
VI.	Corrective Action Conditions.....	37
VII.	Compliance Schedule Conditions.....	50

Attachments

- A. RCRA Subtitle C Site Identification Form
- B. Facility Description
- C. Waste Characteristics/Waste Analysis Plan
- D. Process Information
- E. Groundwater Monitoring (not applicable)
- F. Procedures to Prevent Hazards
- G. Contingency Plan
- H. Personnel Training
- I. Closure Plan
- J. Corrective Action for Solid Waste Management Units

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to store and treat hazardous waste in accordance with the conditions of the RCRA permit. Any storage or treatment of hazardous waste not authorized in this permit or the regulations is prohibited.

Pursuant to 329 IAC 3.1 and 40 CFR 260 through 270 (for HSWA Provisions), compliance with the conditions of this RCRA Permit generally constitutes compliance for purposes of enforcement, with the Indiana Environmental Management Act and RCRA, as amended by HSWA, except for those requirements not included in the Permit which become effective by statute, or which are promulgated under 329 IAC 3.1 and 40 CFR Section 260 through 270, restricting the placement of hazardous wastes in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any Order issued or any action brought under Section 3013 or Section 7003 of RCRA; Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 601), commonly known as CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9606(a)), commonly known as SARA, or any other law providing for protection of public health or the environment. 329 IAC 3.1-13; 40 CFR 270.4; IC 13

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 329 IAC 3.1-13-7. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of the permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this

permit shall not be affected thereby. In the event that a condition of this permit is stayed for any reason, all provisions of the permit severable from the stayed provisions shall take effect. With regard to stayed provisions of the permit, the Permittee shall continue to comply with the related applicable standards and relevant permitted standards in 329 IAC 3.1-9 and 329 IAC 3.1-15 from the previously issued permit until final resolution of the stayed condition, unless the Commissioner of the Indiana Department of Environmental Management (Commissioner) determines that compliance with the related applicable and relevant standards would be technologically incompatible with other conditions of this permit which have not been stayed. 329 IAC 3.1-13; 40 CFR 270.32

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of the RCRA permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of IC 13 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 329 IAC 3.1-13; 40 CFR 270.30(a); 270.61
2. Duty to Reapply. The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless:
 - a) the Permittee no longer wishes to operate a hazardous waste management facility and all remaining corrective action obligations have been met; or,
 - b) permission for submittal on a later date has been granted by the Commissioner.

The Commissioner shall not grant permission for applications to be submitted later than the expiration date of the existing permit. 329 IAC 3.1-13; 329 IAC 3.1-13-3(h)

3. Permit Expiration. The duration of this permit shall not exceed five (5) years from the effective date of the permit, except as provided by 329 IAC 3.1-13-15. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application for a new permit and through no fault of the Permittee, the Commissioner has not issued a new permit with an effective date under 329 IAC 3.1-13-14 on or before the expiration date of the previous permit. 329 IAC 3.1-13-16
4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 329 IAC 3.1-13; 40 CFR 270.30(c)
5. Duty to Mitigate. In the event of non-compliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. 329 IAC 3.1-13; 40 CFR 270.30(d)
6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit. 329 IAC 3.1-13; 40 CFR 270.30(e)
7. Duty to Provide Information. The Permittee shall furnish to the Commissioner, within a reasonable time, any relevant information which the Commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Commissioner, upon request, copies of records required to be kept by this permit. 329 IAC 3.1-13; 40 CFR 270.30(h); 264.74

8. Inspection and Entry. Pursuant to 329 IAC 3.1-1-3 and 40 CFR 270.30(i), the Permittee shall allow the Commissioner, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(1));
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(2));
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(3)); and
 - d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by IC 13, any substances or parameters at any location (329 IAC 3.1-13; 40 CFR 270.30(i)(4)).
9. Monitoring and Reporting.
- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from 329 IAC 3.1-6; 40 CFR 261, Appendix I. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, (Third Edition as amended by updates) (as referenced in 40 CFR 260.11); Standard Methods for the Examination of Water and Wastewater, (the 19th Edition, 1995); or an equivalent method as specified in the attached Waste Analysis Plan. 329 IAC 3.1-13; 40 CFR 270.30(j)(1)
 - b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of

all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report, or record or for a period of time greater than three (3) years as specified elsewhere in this permit. Corrective Action records must be maintained at least 3 years after all Corrective Action activities have been completed. These periods may be extended by request of the Commissioner at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. 329 IAC 3.1-13; 40 CFR 270.30(j)(2) and 40 CFR 264.74(b)

- c. Pursuant to 329 IAC 3.1-13; 40 CFR 270.30(j)(3), records of monitoring information shall include:
 - i. The date(s), exact place, and times of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) and laboratory who performed the analyses;
 - v. The analytical technique(s) or method(s) used. Analytical technique(s) or method(s) is defined as encompassing both the sampling technique (method) and method of chemical analysis used. This information must be provided in the Waste Analysis Plan; and
 - vi. The result(s) of such analyses, including QA/QC documentation.
- d. Monitoring results shall be reported to the Commissioner at the intervals specified elsewhere in this permit. 329 IAC 3.1-13; 40 CFR 270.30(l)(4)

10. Reporting Planned Changes. The Permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility. 329 IAC 3.1-13; 40 CFR 270.30(l)(1)

11. Certification of Construction or Modification. Pursuant to 329 IAC 3.1-13 and 40 CFR 270.30(l)(2), the Permittee may not treat, store or dispose of hazardous waste in a modified portion of the facility except as provided in 40 CFR 270.42 until:
 - a. The Permittee has submitted to the Commissioner by certified mail or hand delivery a letter signed by the Permittee and a qualified professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - b.
 - i. The Commissioner has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - ii. Within 15 days of the date of submission of the letter described in I.D.11.a., the Permittee has not received notice from the Commissioner of his or her intent to inspect, prior inspection is waived and the Permittee may commence treatment, storage, or disposal of hazardous waste.
12. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 329 IAC 3.1-13; 40 CFR 270.40(b) or 40 CFR 270.41(b)(2) to identify the new Permittee and incorporate such other requirements as may be necessary under IC 13. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 329 IAC 3.1 and IC 13, including all applicable corrective action requirements. 329 IAC 3.1-13; 40 CFR 270.40
13. Reporting Anticipated Noncompliance. The Permittee shall give advance notice to the Commissioner of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notification does not excuse the Permittee's duty to comply with permit requirements. 329 IAC 3.1-13; 40 CFR 270.30(l)(2)
14. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date. 329 IAC 3.1-13; 40 CFR 270.30(l)(5)

15. Twenty-four Hour Reporting. The Permittee shall report to the Commissioner any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally to the IDEM 24 hour emergency telephone number 317/233-7745, within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. Pursuant to 329 IAC 3.1-13; 40 CFR 270.30(l)(6), this report shall include the following:
- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies.
 - b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply

with the five (5)-day written notice requirement if the Commissioner waives the requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Condition I.D.15, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Condition I.D.15. 329 IAC 3.1-13; 40 CFR 270.30(l)(10)
17. Other Information. When the Permittee becomes aware that the facility failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Commissioner, the Permittee shall promptly submit such facts or information. 329 IAC 3.1-13; 40 CFR 270.30(l)(11)
18. Submittal of Reports or Other Information. All reports or other information required to be submitted by the terms of this permit shall be sent to:

Commissioner
Indiana Department of Environmental Management
Hazardous Waste Permit Section
MC 66-20, IGCN 1101
100 North Senate Avenue
Indianapolis, IN 46204

- E. SIGNATORY REQUIREMENT All reports or other information requested by the Commissioner shall be signed and certified as required by 329 IAC 3.1-13; 40 CFR 270.11.
- F. CONFIDENTIAL INFORMATION The Permittee may claim confidential any information required to be submitted by this permit in accordance with 329 IAC 3.1-13-4, 329 IAC 6.1, and IC 13-14-11-1.
- G. WASTE MINIMIZATION

The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that the Permittee generates to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the

present and future threat to human health and the environment, in accordance with 40 CFR 264.73(b)(9) and Section 3005(h) of RCRA, 42 U.S.C. §6925(h). The certifications shall be recorded, as they become available, and maintained in the operating record until closure of the facility.

- H. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE Except as noted in the regulations, the Permittee shall maintain at the facility, until closure is completed and certified by the owner/operator and a qualified professional engineer, the following documents and amendments, revisions and modifications to these documents:
1. Waste Analysis Plan as required by 329 IAC 3.1-9, 40 CFR 264.13 and this permit and any document(s) referenced therein to describe on-site procedures.
 2. Personnel training documents and records as required by 329 IAC 3.1-9, 40 CFR 264.16(d) and (e) and this permit.
 3. Contingency Plan as required by 329 IAC 3.1-9, 40 CFR 264.53(a), and this permit.
 4. Closure Plan as required by 329 IAC 3.1-9, 40 CFR 264.112(a)(2), and this permit.
 5. Cost estimate for facility closure as required by 329 IAC 3.1-15-3, and this permit.
 6. Operating record as required by 329 IAC 3.1-9, 40 CFR 264.73, and this permit.
 7. Inspection schedules as required by 329 IAC 3.1-9, 40 CFR 264.15(b)(2), and this permit.
 8. Record of facility inspections, as required by 329 IAC 3.1-9, 40 CFR 264.15(d), and this permit, shall be maintained for at least three years.
 9. Copies of all manifests for shipments of hazardous waste received at and originating from this facility, as required by 329 IAC 3.1-7, 329 IAC 3.1-9-2(6) 40 CFR 262.40, 40 CFR 264.71, and this permit, shall be maintained for at least three years.

10. Notifications from generators subject to 40 CFR Part 268, Subtitle C, that specify treatment standards, as required by 40 CFR 264.73, 268.7, and this permit.
11. Waste minimization certifications must be part of the operating record as required by 40 CFR 264.73(b)(9).
12. Corrective Action reports and records as required by Permit Conditions VI of this permit. These reports and records must be maintained for at least 3 years after all Corrective Action Activities have been completed; and
13. Records regarding closed-vent systems and control devices and/or equipment leaks as required by Condition V of this permit.

II. GENERAL FACILITY CONDITIONS

- A. DESIGN AND OPERATION OF FACILITY The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
- B. Required Notice
- (1) The Permittee shall notify the Commissioner in writing at least four (4) weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste having the same EPA hazardous waste number from the same foreign source is not required. 329 IAC 3.1-9, 40 CFR 264.12(a)
 - (2) When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), it must inform the generator in writing that it has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record. (See Permit Condition II.K.1). 329 IAC 3.1-9, 40 CFR 264.12(b)
- C. GENERAL WASTE ANALYSIS The Permittee shall comply with the procedures described in the attached Waste Analysis Plan, Attachment C, which is incorporated herein by reference.
- D. SECURITY The Permittee shall comply with the security provisions of 329 IAC 3.1-9 and 40 CFR 264.14(b) and (c) as described in the Procedures to Prevent Hazards, Attachment F, which is incorporated herein by reference.
- E. GENERAL INSPECTION REQUIREMENTS The Permittee shall follow the inspection schedule in the Procedures to Prevent Hazards, Attachment F. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 329 IAC 3.1-9 and 40 CFR 264.15(c). Records of inspections shall be kept as required by 329 IAC 3.1-9 and 40 CFR 264.15(d).
- F. PERSONNEL TRAINING The Permittee shall conduct personnel training as required by 329 IAC 3.1-9 and 40 CFR 264.16. This training program shall follow the attached outline in the Personnel Training Plan, Attachment H, which is incorporated herein by reference. The Permittee shall maintain training documents and records as required by 329 IAC 3.1-9 and 40 CFR 264.16(d) and (e).

G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE The Permittee shall comply with the requirements of 329 IAC 3.1-9 and 40 CFR 264.17.

H. PREPAREDNESS AND PREVENTION

1. Required Equipment. The Permittee shall equip the facility with the equipment set forth in the attached Contingency Plan, Attachment G, which is incorporated herein by reference, and as required by 329 IAC 3.1-9 and 40 CFR 264.32.
2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in Attachment G (see the previous permit condition) as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the inspection schedule in Attachment F.
3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm systems as required by 329 IAC 3.1-9 and 40 CFR 264.34.
4. Required Aisle Space. The Permittee shall maintain aisle space as required by 329 IAC 3.1-9 and 40 CFR 264.35.
5. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 329 IAC 3.1-9 and 40 CFR 264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

I. CONTINGENCY PLAN

1. Implementation of Plan. The Permittee shall immediately comply with the provisions of the Contingency Plan, Attachment G, and follow the emergency procedures described by 329 IAC 3.1-9-2(4) and (5) and 40 CFR 264.56 whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which threatens or could threaten human health or the environment.
2. Copies of Plan. The Permittee shall comply with the requirements of 329 IAC 3.1-9 and 40 CFR 264.53.

3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by 329 IAC 3.1-9 and 40 CFR 264.54.
 4. Emergency-Coordinator. The Permittee shall comply with the requirements of 329 IAC 3.1-9 and 40 CFR 264.55, concerning the Emergency Coordinator.
- J. MANIFEST SYSTEM The Permittee shall comply with the manifest requirements of 329 IAC 3.1-9, 40 CFR 264.71, 264.72, and 264.76.
- K. RECORD KEEPING AND REPORTING In addition to the record keeping and reporting requirements specified elsewhere in this Permit, the Permittee shall comply with the following record keeping and reporting requirements:
1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 329 IAC 3.1-9 and 40 CFR 264.73.
 2. Sampling and Analysis Records. The Permittee shall keep original or exact copies of all sampling and analysis records. These records shall be available for inspection, in accordance with 329 IAC 3.1-9 and 40 CFR 264.74.
 3. Biennial Report. The Permittee shall comply with the biennial report requirements of 329 IAC 3.1-9 and 40 CFR 264.75.
- L. CLOSURE
1. Performance Standard. The Permittee shall close the facility as required by 329 IAC 3.1-9 and 40 CFR 264.111 and in accordance with the Closure Plan, Attachment I, which is incorporated herein by reference.
 2. Amendment to Closure Plan. The Permittee shall amend the Closure Plan in accordance with 329 IAC 3.1-9 and 40 CFR 264.112(c) whenever necessary, and whenever requested by the Commissioner in accordance with 40 CFR 264.112(c)(4).
 3. Notification of Closure. Pursuant to 329 IAC 3.1-9 and 40 CFR 264.112(d) the Permittee shall notify the Commissioner in writing at least sixty (60) days prior to the date he expects to begin closure of a surface

impoundment, waste pile, land treatment, or landfill unit, or final closure of a facility with such a unit. The Permittee must notify the Commissioner in writing at least forty-five (45) days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed.

4. Time Allowed for Closure. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the Closure Plan, Attachment I. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the Closure Plan.
5. Disposal and/or Decontamination of Equipment. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment contaminated with hazardous waste as required by 329 IAC 3.1-9, 40 CFR 264.114 and the Closure Plan, Attachment I.
6. Certification of Closure. When closure is completed, the Permittee and a qualified professional engineer shall certify to the Commissioner that the facility has been closed in accordance with the specifications in the Closure Plan as required by 329 IAC 3.1-9 and 40 CFR 264.115.

M. COST ESTIMATE FOR FACILITY CLOSURE The Permittee's closure cost estimate, prepared in accordance with 329 IAC 3.1-15-3, is specified in the Closure Plan, Attachment I.

1. The Permittee must adjust the closure cost estimate for inflation within sixty (60) days prior to each anniversary date of the establishment of the financial instrument, as required by 329 IAC 3.1-15-3(b); or, when using the financial test or corporate guarantee, the Permittee must adjust the closure cost estimate for inflation within thirty (30) days after the close of the Permittee's fiscal year and before the submission of updated information to the Commissioner, as required by 329 IAC 3.1-15-3(b).
2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan as required by 329 IAC 3.1-15-3(c).
3. The Permittee must keep at the facility the latest closure cost estimate as required by 329 IAC 3.1-15-3(d).

- N. FINANCIAL ASSURANCE FOR FACILITY CLOSURE The Permittee shall demonstrate continuous compliance with 329 IAC 3.1-15-4 by providing documentation of financial assurance when required, and as specified by 329 IAC 3.1-15-10, in at least the amount of the cost estimates required by Permit Condition II.M. Changes in financial assurance mechanisms must be approved by the Commissioner pursuant to 329 IAC 3.1-15-4.
- O. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS The Permittee shall comply with 329 IAC 3.1-15-9 whenever necessary.
- P. LIABILITY REQUIREMENTS The Permittee shall demonstrate continuous compliance with the requirements of 329 IAC 3.1-15-8 and the documentation requirements of 329 IAC 3.1-15-10, including the requirements to have and maintain liability coverage for sudden, and accidental occurrences in the amount of a least \$1 million per occurrence with an annual aggregate of at least \$2 million for sudden accidental occurrences.
- Q. LAND DISPOSAL RESTRICTIONS
1. The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by federal statute.
 2. The Permittee shall comply with the dilution prohibition requirements described in 40 CFR 268.3.
 3. The Permittee shall comply with all testing, tracking, and recordkeeping requirements for treatment facilities described in 40 CFR 268.7.
 4. The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR 268 Subpart E.
 5. If the Permittee applies to the administrator of the EPA for an exemption from land disposal restrictions described in 329 IAC 3.1-12-2, the Permittee must submit copies of such request and all supporting documents to the commissioner. If the Permittee obtains an exemption from the administrator of the EPA, the Permittee must apply to the commissioner for concurrence that such an exemption is consistent with the policies outlined in IC 13.

- R. EQUIPMENT OR SECONDARY CONTAINMENT MATERIAL PERFORMANCE STANDARD An equipment or secondary containment material performance standard is a measurable standard which meets or exceeds the applicable regulatory requirements, and which has been developed by recognizing, identifying and addressing the critical application and purpose of the subject equipment or secondary containment material in a manner acceptable to the Commissioner. Through the application of these considerations, the permittee has established language in Attachment D of this Permit for equipment-specific and secondary containment material-specific standards for the purpose of allowing greater flexibility and speed in the course of replacing equipment or secondary containment materials.

A performance standard is, in every aspect, equivalent to a prescriptive requirement. It is a standard for which "functional equivalence" has been carefully considered, established and specified in the permit to accommodate future needs. For this reason, implementation of this provision requires no further permit requirements or actions other than a notation in the operating records of the facility and a letter of notification to IDEM, OLQ, Permits Branch, specifying the action taken and the equipment or secondary containment material that was selected for this purpose. The letter of notification must be submitted to IDEM, OLQ, Permits Branch, no later than fifteen (15) days after the new equipment or secondary containment material meeting the identified performance standard is brought into operation, applied or installed. However, if the use of equipment or a secondary containment material meeting the performance standard will result in additional changes to the permit (e.g., inspection requirements, etc.), then Tradebe shall submit the appropriate permit modification request prior to replacing the equipment or secondary containment materials.

III. CONTAINER STORAGE AND TREATMENT CONDITIONS

A. WASTE IDENTIFICATION

1. The Permittee may store and/or treat a total volume of 605,000 gallons of wastes identified in Attachment C in containers at the facility, subject to the terms of this permit. A maximum of 309,980 gallons of containerized hazardous waste with free liquids may be stored in the permitted areas. After the approval of the construction of Area 5 Cylinder Room and Area 9 as specified in the compliance schedule, the Permittee may store an additional 660 gallons and 17,600 gallons, respectively for a maximum of 328,240 gallons of containerized hazardous waste with free liquids.
2. The Permittee is prohibited from storing hazardous waste that is not identified in Attachment C, except as otherwise authorized by the U.S. EPA.

B. UNIT LOCATION The container handling, storage, and treatment facility is located as shown in the site plan in Attachment B.

C. CONDITION OF CONTAINERS If a container holding hazardous waste is not in good condition (e.g., appreciable rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit. (329 IAC 3.1-9 and 40 CFR 264.171)

D. COMPATIBILITY OF WASTE WITH CONTAINERS The Permittee shall assure that the ability of the container to contain the waste is not impaired as required by 329 IAC 3.1-9 and 40 CFR 264.172.

E. MANAGEMENT OF CONTAINERS

1. The Permittee shall manage containers as follows as required by 329 IAC 3.1-9, 40 CFR 264.173, and Attachment D of this Permit.
 - (a) A container holding hazardous waste must always be sealed during storage, except when it is necessary to add or remove waste.
 - (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

- (c) Containers of thirty (30) gallons or more must be stored so that they can be inspected for leaks and for deterioration caused by corrosion or other factors, without having to move the containers during the inspection and must be stored to maintain adequate aisle space between rows of containers to facilitate inspection, as specified in Attachment D.
- 2. (a) Containerized hazardous waste either being transferred from one permitted unit to another (such as from container storage to tank storage) or being removed from one permitted unit followed by replacement back into that same unit shall remain outside of permitted units only for the minimum time necessary to either transfer the containers to a different storage unit or to remove the containers, perform the activities that required the staging to occur, and return the containers to a permitted storage unit. In no instance shall this time period exceed eight (8) hours. The containers will be managed in accordance with applicable conditions in Attachment D. Documentation of container movement from a permitted storage area to a staging area followed by placement into a permitted storage area will include the identification of the container, the date of movement, the time the first container was removed from permitted storage, the location of the staging area, and the time the first container was removed from the staging area and placed into permitted storage. This documentation shall be maintained for 30 days.
- (b) The Permittee shall ensure that transport vehicles loaded with non-processed hazardous waste for shipment off-site leave the facility (or contiguous property controlled by the Permittee) within 24 hours of the time the hazardous waste is first moved out of permitted storage areas for loading onto the transport vehicle. If the shipment is cancelled, the waste must be placed back into permitted storage within the original 24 hour period.

The Permittee will document the time the first container is placed into an outbound trailer. The document identifying the time will be attached to a copy of the outbound manifest and placed inside the loaded trailer.

- (c) The Permittee shall not have more than 605,000 gallons of containerized hazardous waste (excluding Tradebe-generated hazardous waste subject to the 90-day generator storage requirements) at the facility at any one time. The maximum capacity of each container storage area is listed in Table D-1, Attachment D. All containers of hazardous waste at the facility shall be counted towards the permitted capacity, excluding Tradebe's generated waste, exempt scrap metal, and other exempt wastes.
- (d) Incoming hazardous waste from an off-site generator shall be placed in permitted units within seventy-two (72) hours, not including non-operating days, of entering the facility boundary (or contiguous property controlled by the permittee) unless the permittee rejects all or part of an incoming shipment. In the case of rejected loads the permittee shall have an additional sixty (60) days to ship the waste off-site to an alternate TSDf or to the generator, in accordance with the requirements of 40 CFR 264.72. During this timeframe the Permittee must ensure that the rejected load is maintained in a secure location and clearly labeled. An operating day is any 24 hour period during which at least a partial shift is worked by employees who process, treat, or place into storage hazardous waste at the facility.

All incoming dropped loaded trailers will be logged in by a member of the Permittee's Receiving Team or other designated individual; the log will be located in the Receiving Team's office. Information to the "Incoming Trailer Log" must be filled out immediately (within the hour) upon the truck entering the facility boundary (or contiguous property controlled by the Permittee). Included on the log will be the following information: Time and Date the trailer entered the Permittee's property; Trailer Number; Confirmation and initials of the person logging the trailer. The old logs will be kept for 30 days in the receiving office.

The requirement that incoming hazardous waste be placed in permitted units within seventy-two (72) hours, not including non-operating days, of entering the facility boundary (or contiguous property controlled by the permittee) does not apply to Tradebe-generated waste (i.e., processed waste) that has been rejected by the designated facility. Rail cars containing Tradebe-generated waste that have been rejected by the designated facility are

managed according to the applicable language contained in Attachment B. Other containers containing Tradebe-generated waste that have been rejected by the designated facility shall be managed pursuant to the generator requirements.

- F. CONTAINMENT The Permittee shall construct, operate, and maintain the containment system in accordance with the requirements of 329 IAC 3.1-9 and 40 CFR 264.175 as specified in Process Information, Attachment D, which is incorporated herein by reference.
- G. INSPECTION The Permittee shall inspect the container storage areas at least weekly, to detect leaking containers and deterioration of containers and the containment system, caused by corrosion or other factors, as required by 329 IAC 3.1-9 and 40 CFR 264.174.
- H. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE The Permittee shall not locate containers holding ignitable or reactive waste within fifteen (15) meters (fifty (50) feet) of the facility's property line, as required by 329 IAC 3.1-9 and 40 CFR 264.176. The railcars will not be required to be stored at least 50 feet from the facility's property line, as long as the land use of the property adjacent to the railcars does not change.
- I. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE
1. Prior to placing incompatible waste or incompatible waste and materials in the same container, the Permittee shall comply with 329 IAC 3.1-9 and 40 CFR 264.17(b) as specified in the Process Information, Attachment D.
 2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or materials.
 3. The Permittee shall separate containers of incompatible wastes as indicated in the Process Information, Attachment D, as required by 329 IAC 3.1-9 and 40 CFR 264.177(c).
 4. The Permittee must document compliance with Permit Condition III.I.3. as required by 329 IAC 3.1-9 and 40 CFR 264.17(c) and place this documentation in the operating record (Permit Condition II.K.1.).

J. CLOSURE REQUIREMENTS

1. At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed, as required by 329 IAC 3.1-9 and 40 CFR 264.178, and in accordance with the Closure Plan contained in Attachment I.
2. At closure, as throughout the operating period, unless the Permittee can demonstrate in accordance with 329 IAC 3.1-9 and 40 CFR 261.3(d) that the solid waste removed from the containment system is not a hazardous waste, the Permittee becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 329 IAC 3.1 and 40 CFR 262 through 266. (329 IAC 3.1-9 and 40 CFR 264.178)
3. Upon certification by the owner/operator and an independent registered professional engineer that part or all of the storage facility has been properly closed, those provisions of this permit which allow for the continued operation of the closed portion of the facility are terminated. The amount of wastes allowed to be stored is reduced to reflect the partial closure of this facility. Waste types which were only authorized for storage at the closed portion of the facility are deleted from this permit.

IV. TANK STORAGE AND TREATMENT CONDITIONS

A. WASTE IDENTIFICATION

1. The Permittee may store and/or treat a total volume of 198,357 gallons of wastes identified in Attachment C in tanks, subject to the terms of this permit. After the approval of the construction/installation of Tanks 5R-1 and 5D-1 as specified in the Compliance Schedule Conditions, an additional 250 gallons of wastes in Tank 5R-1 and 2,250 gallons of wastes in Tank 5D-1 may be stored and or treated resulting in a total volume of 200,857 gallons.
2. The Permittee is prohibited from storing hazardous waste that is not identified in Attachment C.

B. LOCATION OF TANKS The tanks are located as shown in the site plan in Attachment B.

C. DESIGN OF TANKS The Permittee shall construct, operate, and maintain all tanks as required by either 329 IAC 3.1-9, 40 CFR 264.191, or 264.192, as specified in the Tank Storage Plan, Attachment D, which is incorporated herein by reference.

D. GENERAL OPERATING REQUIREMENTS

1. The Permittee shall not place hazardous wastes in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. (329 IAC 3.1-9, 40 CFR 264.194(a))

Hazardous waste or treatment reagents must not be placed in a tank system if they could cause the tank system to rupture, leak, corrode, or otherwise fail within the projected life expectancy of the tank, to which the hazardous waste or treatment reagent is regularly and routinely exposed. The projected life expectancy is the time period in which the tank shell thickness is reduced to a point where it no longer meets industrial standards. The Permittee shall be able to document and demonstrate, upon inspection by Agency representatives, compliance with the following:

The Permittee shall show compliance with 40 CFR 264.194(a) for tanks by maintaining minimum design shell and bottom plate

thicknesses or other tank structural integrity maintenance mechanism based on accepted industrial tank standards such as American Petroleum Institute (API), American Society of Mechanical Engineers (ASME) and Underwriters Laboratory (UL). The facility shall show compliance by any of the following methods:

- a. Routine and systematic tank wall thickness testing utilizing industrial standards and methodology shall be conducted at a time interval of no more than five (5) years between each testing.
- b. Valid corrosivity testing data confirming that the waste or reagents in the tank will not cause failure within the projected life, based on the projected maximum corrosion rate.
- c. Any other method which is determined to be essentially equivalent to either of the above methods and is an accepted industrial practice.

Tanks that fail any of the above test methods must be immediately removed from service and replaced, repaired or serviced.

2. The total normal venting capacity shall be at least the sum of the venting requirements for solvent movement and thermal effect. The total inbreathing (vacuum) venting capacity and the total outbreathing (pressure) venting capacity shall be the following as specified in the table below cubic feet of free air per hour (CFH). The actual capacity of the vent must be determined by Section 1.5 of the API Standard 2000.

Tank	Inbreathing venting capacity (SCFH)	Outbreathing venting capacity (SCFH)
1R	301	319
4	298	316
6	960	979
7	79	97
18	460	479
19	460	479
20	444	463

Tank	Inbreathing venting capacity (SCFH)	Outbreathing venting capacity (SCFH)
21	460	479
22	460	479
23	460	479
29	496	514
HP24	88	106
52	287	306
53	287	306
54	287	306

3. The maximum input and output of the tank system shall not exceed 120 gallons per minute.
4. The information contained in Permit Condition IV.D.2. and 3. is solely to determine venting capacity for tank design. The Permittee is not required to monitor for nor demonstrate compliance with the information in Permit Condition IV.D.2. and 3. Furthermore, Permit Condition IV.D.2. and 3. are not enforceable except for calculating the venting capacity for tank design.
5. The Permittee shall prevent spills and overflows from the tank or containment systems using the methods described in Procedures to Prevent Hazards, Attachment F. (329 IAC 3.1-9, 40 CFR 264.194)b))

E. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. The Permittee shall not place ignitable or reactive waste in a tank system or in the secondary containment system, unless the procedures described in Attachment D are followed, as required by 329 IAC 3.1-9 and 40 CFR 264.198(a).
2. The Permittee shall document compliance with Permit Condition IV.E.1. as required by 329 IAC 3.1-9 and 40 CFR 264.17(c) and place this documentation in the operating record (Permit Condition II.K.1.).
3. The Permittee shall comply with the requirements for the maintenance of protective distances between the waste management area and any public

ways, streets, alleys, or an adjoining property line that can be built upon, as required in Tables 2-1 through 2-6 of the National Fire Protection Association's Flammable and Combustible Liquids Code. (329 IAC 3.1-9, 40 CFR 264.198(b))

F. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. The Permittee shall not place incompatible wastes in the same tank system or place hazardous waste in a tank system that previously held an incompatible waste or material unless the procedures specified in Attachment D are followed, as required by 329 IAC 3.1-9, and 40 CFR 264.199(b).
2. The Permittee shall document compliance with Permit Condition IV.F.1. as required by 329 IAC 3.1-9 and 40 CFR 264.17(c) and place this documentation in the operating record (Permit Condition II.K.1.).

G. CONTAINMENT AND DETECTION OF RELEASES

1. In order to prevent the release of hazardous waste or hazardous constituents to the environment, the Permittee shall provide secondary containment that meets the requirements of 329 IAC 3.1-9 and 40 CFR 264.193.
2. In the event of a leak or a spill from the tank system, from a secondary containment system, or if a system becomes unfit for continued use, the Permittee shall (pursuant to 329 IAC 3.1-9 and 40 CFR 264.196) remove the system from service immediately and complete the following actions:
 - a. Stop the flow of hazardous waste into the system and inspect the system to determine the cause of the release.
 - b. Remove waste from the system within 24 hours of the detection of the leak to prevent further release and to allow inspection and repair of the system. If the Permittee finds that it will be impossible to meet this time period, the Permittee shall notify the Commissioner and demonstrate that a longer time period is required.

If the collected material is a hazardous waste, it must be managed in accordance with all applicable requirements. The Permittee shall note that if the collected material is discharged through a point

source to U.S. waters or to a POTW, it is subject to requirements of the Clean Water Act. If the collected material is released to the environment, it may be subject to reporting under 40 CFR Part 302.

- c. Contain visible releases to the environment. The Permittee shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.
- d. Close the system in accordance with the Closure Plan, Permit Attachment I, unless the following actions are taken:
 - i. For a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore integrity of the system before returning the tank system to service.
 - ii. For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee shall repair the primary system prior to returning it to service.
- e. For all major repairs to eliminate leaks or restore the integrity of the tank system, the Permittee must obtain a certification by an independent, qualified, registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are: installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.

H. INSPECTION SCHEDULES AND PROCEDURES

- 1. The Permittee shall inspect the tank system, in accordance with Permit Attachment F, and shall complete the items in Permit Conditions IV.H.2 and 3 as part of those inspections.
- 2. The Permittee shall inspect the overfill controls, in accordance with the schedule in Permit Attachment F. (329 IAC 3.1-9, 40 CFR 264.195(a))

3. The Permittee shall inspect the following components of the tank system once each operating day: (329 IAC 3.1-9, 40 CFR 264.195(b))
 - a. Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
 - b. Data gathered from monitoring equipment (e.g., pressure or temperature gauges) to ensure that the tank system is being operated according to its design; and
 - c. Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots).
4. The Permittee shall document compliance with Permit Conditions IV.H.2 and 3 and place this documentation in the operating record for the facility. (329 IAC 3.1-9, 40 CFR 264.195(d))

I. RECORD KEEPING AND REPORTING

1. The Permittee shall report to the Commissioner, within twenty-four (24) hours of detection, when a leak or spill occurs from the tank system or secondary containment system to the environment. (329 IAC 3.1-9, 40 CFR 264.196(1)). A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned-up, need not be reported. (329 IAC 3.1-9, 40 CFR 264.196(d)(2)). If the Permittee has reported the release pursuant to 40 CFR Part 302, this report satisfies the requirements of this Permit Condition. (329 IAC 3.1-9, 40 CFR 264.196(d)(1))
2. Within thirty (30) days of detecting a release to the environment from the tank system or secondary containment system, the Permittee shall report the following information to the Commissioner: (329 IAC 3.1-9, 40 CFR 264.196(d)(3))
 - a. Likely route of migration of the release;
 - b. Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
 - c. Results of any monitoring or sampling conducted in connection with

the release. If the Permittee finds it will be impossible to meet this time period, the Permittee should provide the Commissioner with a schedule of when the results will be available. This schedule must be provided before the required thirty (30)-day submittal period expires;

- d. Proximity of downgradient drinking water, surface water, and populated areas; and
 - e. Description of response actions taken or planned.
3. The Permittee shall submit to the Commissioner all certifications of major repairs to correct leaks within seven (7) days from returning the tank system to use. (329 IAC 3.1-9, 40 CFR 264.196(f))

J. CLOSURE REQUIREMENTS

- 1. At closure of a tank system, the Permittee must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, structures, and equipment contaminated with waste, and manage them as hazardous waste, unless 329 IAC 3.1-6 and 40 CFR 261.3(d) applies. The procedures specified in the Closure Plan, Attachment I shall be followed. (329 IAC 3.1-9, 40 CFR 264.197(a))
- 2. At closure or replacement of a tank or tanks within the tank system, the Permittee must remove or decontaminate all waste residues and contaminated containment system components (liners, etc.), and manage them as hazardous waste unless 329 IAC 3.1-6 and 40 CFR 261.3(d) applies. The decontamination procedures in the Closure Plan, Attachment I shall be followed.
- 3. If the Permittee demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in 329 IAC 3.1-9 and 40 CFR 264.197(a), then the Permittee must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (329 IAC 3.1-9, 40 CFR 264.310). In addition, for the purposes of closure, post-closure and financial responsibility, such a tank system is then considered to be a landfill and the owner or operator must meet all of the requirements for landfills specified in 329 IAC 3.1-9, 329 IAC 3.1-15 and 40 CFR 264 Subpart G. (329 IAC 3.1-9, 40 CFR 264.197(b))

4. Upon certification by the owner/operator and an independent registered professional engineer that part or all of this tank storage facility has been properly closed, those provisions of this permit which allow for the continued operation of the closed portion of the facility are terminated. The amount of wastes allowed to be stored is reduced to reflect the partial closure of this facility. Waste types which were only authorized for tank storage at the closed portion of the facility are deleted from this Permit.

V. AIR EMISSION STANDARD CONDITIONS

A. PROCESS VENTS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart AA, regarding air emission standards for process vents until the information described in Permit Condition VII. F. has been approved by IDEM's Office of Land Quality.

B. EQUIPMENT LEAKS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment.

C. TANKS AND CONTAINERS

The Permittee shall comply with all applicable requirements of 40 CFR Part 264, Subpart CC, regarding air emission standards for tanks and containers.

D. RECORDKEEPING

The Permittee shall comply with all applicable recordkeeping and reporting requirements described in 40 CFR 40 CFR 264.1064, 264.1065 (Subpart BB) and 40 CFR 264.1089, 264.1090 (Subpart CC).

E. DUTY TO COMPLY WITH FUTURE REQUIREMENTS

The Permittee shall comply with all self-implementing provisions of any future air regulations promulgated by RCRA, as amended by HSWA.

VI. CORRECTIVE ACTION CONDITIONS

A. STANDARD REQUIREMENTS

1. Corrective Action At The Facility

In accordance with Section 3004(u) of RCRA (Indiana Code 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous waste(s) or hazardous constituent(s) from any solid waste management unit (SWMU) or area of concern (AOC) at the facility, regardless of the time the waste was placed in such units.

The Permittee may use the principles and procedures set forth in IDEM's Risk Integrated System of Closure (RISC) Technical Resource Guidance Document and User's Guide, dated February 2001, and all revisions and additions thereto, or other risk-based methodologies approved by IDEM's Office of Land Quality Permits Branch, as the basis for selecting risk-based endpoints that will be used for the investigations, studies, interim measures, and corrective measures under the permit. The Permittee shall perform all such work in a manner consistent with, at a minimum, the RISC Technical Guide and Chapter 2 of the RISC Users Guide. The Corrective Action Scope of Work referred to in the RISC Users Guide is included in Attachment J of this permit.

2. Corrective Action Beyond The Facility Boundary

In accordance with Section 3004(v) of RCRA (Indiana Code 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must implement Corrective Action(s) beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the IDEM's satisfaction that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RCRA Facility Investigation, Corrective Measures Study, and Corrective Measures Implementation phases, as determined to be necessary on a case-by-case basis.

3. Notification

a. Field Activities

The Permittee shall notify IDEM at least seven (7) days before engaging in any field activities, such as well drilling, installation of equipment, or sampling. At the request of IDEM, the Permittee shall provide IDEM or its authorized representative split samples of all samples collected by the Permittee pursuant to this permit. Similarly, at the request of the Permittee, IDEM shall allow the Permittee or its authorized representatives to take split or duplicate samples of all samples collected by IDEM under this permit.

b. Submittals

Three (3) copies and one (1) PDF copy on CD of all reports, plans, and other submissions relating to or required by this permit shall be sent to:

Indiana Department of Environmental Management
OLQ Permits Branch – Mail Code 66-20
100 N. Senate Avenue
Indianapolis, IN 46204
Attention: Chief, Hazardous Waste Permit Section

B. IDENTIFICATION OF SWMUs

1. Definitions

- a. "Area of Concern (AOC)" means a unit or area that could potentially produce unacceptable exposures or be a potential source of ground water contamination, but the unit or area does not meet the definition of a solid waste management unit.
- b. "Facility" means all contiguous property under the control of the owner/operator of a facility seeking a permit under Subtitle C.
- c. "Hazardous waste," as defined in IC 13-11-2-99, means a solid waste or combination of solid wastes that may cause or significantly contribute to an increase in: mortality, serious irreversible illness, or an incapacitating reversible illness; or pose a substantial present or

potential hazard to human health or the environment. This term is further defined in 40 CFR Part 261.3.

- d. "Hazardous constituent" means any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264.
 - e. "Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes or hazardous constituents into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents.
 - f. "Solid waste" means any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities. This term is further defined in 40 CFR Part 261.2.
 - g. "Solid Waste Management Unit (SWMU)" means any discernable unit, permitted or unpermitted, existing or historical, at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.
2. SWMUs and AOCs Requiring Corrective Action

Based on the information contained in the administrative record, there are currently no SWMUs or AOCs that require corrective action.

C. NEWLY IDENTIFIED SWMUs OR RELEASES

1. Notification Requirements

The Permittee shall notify the IDEM, within thirty (30) days of discovery, of the following information requirements for any new SWMU identified at the facility, in accordance with 329 IAC 3.1-13-1 and 40 CFR 270.14(d):

- a. the location of the unit on the site topographic map;
- b. designation of the type of unit;
- c. general dimensions and structural description (supply any available drawings);
- d. when the unit was operated; and
- e. specifications of all waste(s) that have been managed at the unit.

2. Release Information

The Permittee must submit to the IDEM, within thirty (30) day of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing SWMU.

3. Corrective Action

The IDEM will review the information provided in Condition VI.C.1. and 2. above, and may as necessary, require further investigations or corrective measures. The Permittee shall submit a written RFI Workplan to the Section Chief of the Hazardous Waste Permit Section in accordance with Condition VI.D.2.

D. CORRECTIVE ACTION ACTIVITIES

The major tasks and required submittal dates are shown below. Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition VI.F.).

1. Interim Measures (IM)

- a. The Permittee may undertake interim measure activities to prevent or minimize the further spread of contamination while long-term remedies are pursued. An IM Workplan shall be submitted to the IDEM for approval before the Permittee initiates any remedial activity. The interim measure(s) must be capable of being integrated into any long-term solution at the facility.

- b. In the event the Permittee identifies an immediate threat to human health or the environment, the Permittee shall immediately notify the Section Chief orally and in writing within seven (7) days summarizing the immediacy and magnitude of the potential threat to human health or the environment.

Upon receiving this information, the IDEM will determine if an IM Workplan is necessary. If one is necessary, the Section Chief will send a notice to the Permittee requiring the submission of an IM Workplan. Within twenty-one (21) days after receiving this notice, the Permittee shall submit to the Section Chief a workplan for approval that identifies the interim measure(s).

The workplan should be consistent with and integrated into any long-term solution at the facility. In addition, the following Interim Measure schedule shall be initiated:

- i. Within five (5) days, the Permittee shall provide an alternate water supply to parties that have a contaminated water supply well;
- ii. Within seven (7) days, the Permittee shall submit a report to the Section Chief detailing the activity pursued and a plan for further Interim Measures activity;
- iii. Within seven (7) days following the Section Chief's transmission of comments, the Permittee shall revise the plan in accordance with the comments; and
- iv. Within seven (7) days following the IDEM's approval or modification of the plan, the Permittee shall implement the revised plan in accordance with the schedule therein.

2. RCRA Facility Investigation (RFI)

The Permittee shall conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from all SWMUs and AOCs identified as requiring an RFI.

a. RFI Workplan

The Permittee shall submit a written RFI Workplan to the Section Chief within ninety (90) days after written notification by the Section Chief that further investigation is necessary.

The IDEM will approve, modify and approve, or disapprove and provide comments on the Workplan in writing to the Permittee. Within sixty (60) days of receipt of such comments, the Permittee shall provide a response to the IDEM's comments.

b. RFI Implementation

Within thirty (30) days of the IDEM's written approval of the RFI Workplan, the Permittee shall implement the plan according to the terms and schedule contained therein.

c. RFI Report

Within ninety (90) days after the completion of the RFI, the Permittee shall submit an RFI Report to the Section Chief. The RFI Report shall describe the procedures, methods, and results of the RFI. The report must contain adequate information to support further corrective action decisions at the facility. After the Permittee submits the RFI Report, the IDEM shall either approve or disapprove the report in writing. If the IDEM disapproves the report, the Section Chief shall notify the Permittee in writing of the deficiencies. The Permittee has sixty (60) days after receipt of the IDEM's comments to submit a revised RFI Report to the Section Chief.

3. Determination of No Further Action

a. Permit Modification

After completion of the RFI, and based on its results and other relevant information, the Permittee may submit an application to the Section Chief for a permit modification under 40 CFR 270.42 to terminate the corrective action tasks of the Corrective Action Activities Schedule for all or a portion of the facility. Tasks identified in Permit Condition VI.F. for the SWMUs, solid waste management areas (a group of SWMUs in an area to be addressed as a single

unit), and/or the AOCs identified in the modification (for a determination of no further action) shall be stayed pending a decision by IDEM. This permit modification must conclusively demonstrate that there are no releases of hazardous waste(s), including hazardous constituents, from SWMUs or AOCs at the facility that pose a threat to human health or the environment.

If, based upon review of the Permittee's request for a permit modification, the results of the completed RFI, and other information, IDEM determines that releases or suspected releases that were investigated either are nonexistent or do not pose a threat to human health or the environment, IDEM will grant the requested modification

b. Further Investigations

A determination of no further action shall not preclude the IDEM from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or likelihood of a release from a SWMU or AOC at the facility is likely to pose a threat to human health or the environment. In such a case, the IDEM shall initiate a modification to the Corrective Action Activities Schedule to rescind the determination made in accordance with Condition VI.D.3.a. Additionally, the IDEM may determine that there is insufficient information on which to base a determination, and may require the Permittee to perform additional investigations as needed to generate the needed information.

4. Corrective Measures Study (CMS) and Remedy Selection

If the IDEM determines, based on the results of the RFI and other relevant information, that corrective measures are necessary, the Section Chief will notify the Permittee in writing that the Permittee shall conduct a CMS. The purpose of the CMS is to develop and evaluate the corrective action alternative(s) that will satisfy the performance objectives specified by the IDEM. The CMS shall be conducted within sixty (60) days of notification by the Section Chief that the CMS is required. This period of time may be extended by the Section Chief if necessary to adequately complete the CMS. Note that this process can be significantly shortened by the

selection of presumptive remedies (i.e., remedies that are known to be effective). Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition VI.F.).

a. CMS Report

Within sixty (60) days after the completion of the CMS, the Permittee shall submit a CMS Report to the Section Chief. The CMS Report shall summarize the results of the investigations for each remedy studied and must include an evaluation of each remedial alternative. After the Permittee submits the CMS Report, the IDEM shall either approve, modify and approve, or disapprove the Report. If the IDEM disapproves the Report, the Section Chief shall notify the Permittee in writing of the deficiencies. The Permittee has sixty (60) days after receipt of the IDEM's comments to submit a revised CMS Report to the Section Chief. The CMS Report, as approved, becomes an enforceable condition of this permit.

b. CMS Remedy Selection

The IDEM will select a corrective measure for implementation based on the following factors. The corrective measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including hazardous constituent(s)); (4) minimize the transfer of contamination from one environmental medium to another; and (5) comply with all applicable standards for management of wastes.

If two or more of the corrective measures studied meet the threshold criteria set out above, the IDEM will choose among alternatives for Corrective Measures Implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the corrective measure will reduce the toxicity, mobility or volume; (3) the corrective measure's short-term effectiveness; (4) the corrective measure's implementability; and (5) the relative cost associated with the alternative. In selecting the corrective measure(s), the IDEM may also consider such other factors as may be presented by site-specific conditions.

5. Permit Modification

Within thirty (30) days of IDEM's selection of a corrective measure, IDEM or the Permittee will initiate a permit modification, pursuant to 40 CFR 270.41 or 40 CFR 270.42, respectively, for the implementation of the corrective measure(s) selected. No permit modification fees are required for any modifications submitted under this condition.

6. Corrective Measures Implementation (CMI)

a. If the corrective measure(s) recommended in the Corrective Measures Study Report is (are) not the corrective measure(s) selected by IDEM after consideration of public comments, the Section Chief shall inform the Permittee in writing of the reasons for such decision. Thirty (30) days after the effective date of the permit modification, the Permittee shall implement the corrective measure(s).

b. Financial Assurance

As part of the permit modification of this permit to incorporate the CMI, the Permittee shall provide financial assurance in the amount specified in the IDEM-approved CMS Report as required by 40 CFR 264.101(b) and (c).

7. Incorporation of plans and reports

All approved plans and reports prepared for this permit shall be incorporated into this permit on the date the Section Chief or his/her designee approves such plan or report.

E. DISPUTE RESOLUTION

1. If IDEM disapproves or modifies and approves any submission required by Condition VI of the permit, IDEM shall provide the Permittee with a written notice setting forth the reasons for the disapproval or modification and approval.
2. If the Permittee disagrees, in whole or in part, with any written decision concerning IDEM's disapproval or modification and approval of any submission required by Condition VI of the permit, the Permittee shall notify

IDEM of the dispute. The Permittee and IDEM shall informally, and in good faith, endeavor to resolve the dispute.

3. If the Permittee and IDEM cannot resolve the dispute informally, the Permittee may pursue the matter formally by submitting a written statement of position to the Commissioner or his/her designee, within twenty-eight (28) days of receipt of IDEM's written disapproval or modification and approval. The Permittee's statement of position shall set forth the specific matters in dispute, the position that the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and shall include any supporting documentation. If the Permittee fails to follow any of the requirements contained in this paragraph, then it shall have waived its right to further consideration of the disputed issue. The IDEM decision to discontinue further consideration under this condition shall constitute a final agency action.
4. IDEM and the Permittee shall have an additional fourteen (14) days from the date of the Commissioner's receipt of the Permittee's statement of position to meet or confer to attempt to resolve the dispute. This time period may be extended by IDEM for good cause. If agreement is reached, the Permittee shall submit a revised submission, if necessary, and shall implement the submission in accordance with such agreement.
5. If the IDEM and the Permittee are not able to reach agreement within the 14-day period, or such longer period corresponding to IDEM's extension for good cause, the Permittee may submit any additional written arguments and evidence not previously submitted, or further explain any arguments or evidence previously submitted, to the Commissioner. Based on the record, the Commissioner, or delegate, will thereafter issue a written decision that shall include a response to the Permittee's arguments and evidence. This written decision will constitute final agency action.
6. Notwithstanding the invocation of this dispute resolution procedure, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that IDEM determines are not substantially affected by the dispute. The activity schedule for those portions of the submission and of the permit which are substantially affected by the dispute shall be suspended during the period of dispute resolution.

F. CORRECTIVE ACTION ACTIVITIES SCHEDULE

<u>Activity</u>	<u>Due Date</u>
1. IM Workplan	21 days after notice by the Section Chief or his/her designee
2. RFI Workplan	90 days after effective date of permit
3. Notification of newly identified SWMUs	30 days after discovery
4. RFI Workplan for newly identified SWMUs	90 days after receipt of Section Chief's notification
5. RFI Workplan modification	60 days after receipt of Section Chief's comments
6. RFI Implementation	30 days after RFI Workplan approved
7. RFI Report	90 days after completion of RFI
8. RFI Report Modification	60 days after receipt of Section Chief's comments
9. Progress Reports on Tasks I through IV (See Corrective Action Scope of Work)	Semi-annually; to coincide with groundwater reporting if possible
10. CMS Report	60 days after receipt of Section Chief's notification
11. CMS Report modification	60 days after receipt of Section Chief's comments
12. Permit Modification for Corrective Measure Implementation	30 days after receipt of Section Chief's notification (Modification may be a Class 1, 2, or 3 at Section Chief's discretion)

- | | |
|--|---|
| 13. CMI Program Plan | 30 days after effective date of permit modification |
| 14. CMI Program Plan Modification | 30 days after receipt of Section Chief's comments |
| 15. CMI Reports | Semi-annually; to coincide with groundwater reporting if possible |
| 16. CMI Report Modification | 30 days after receipt of Section Chief's comments |
| 17. Operation and Maintenance Progress Reports | Semi-annually; to coincide with groundwater reporting if possible |

The IDEM may, at the facility's request, grant extensions to the time frames listed in this section. IDEM-approved time extensions will not require a permit modification.

G. FORCE MAJEURE

"Force Majeure," for purposes of this Permit, is defined as any event arising from causes beyond the control of the Permittee that delays or prevents the performance of any obligation under this Permit despite Permittee's best efforts to fulfill the obligation. The requirement that the Permittee exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event as it is occurring and best efforts to address the effects of any potential force majeure event as it is occurring and following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include financial inability to complete the work required by this Permit nor any increases of costs to perform the work.

The Permittee shall notify IDEM by calling within three (3) calendar days and by writing no later than seven (7) calendar days after any event which the Permittee contends is a force majeure. Such notification shall describe the anticipated length of the delay, the cause or causes of the delay, the measures taken or to be taken by the Permittee to minimize the delay, and the timetable by which these measures will be implemented. The Permittee shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude the

Permittee from asserting any claim of force majeure for that event. The Permittee shall have the burden of demonstrating that the event is a force majeure. The decision of whether an event is a force majeure shall be made by IDEM. Said decision shall be communicated to the Permittee.

If a delay is attributable to a force majeure, IDEM shall extend, verbally or in writing, the time period for performance under this Permit by the amount of time that is attributable to the event constituting the force majeure. Any final determination by IDEM under this section shall be reviewable under IC 4-21.5. However, if the Permittee appeals an IDEM decision concerning force majeure, the accrual of penalties will be suspended during the review of that appeal.

VII. COMPLIANCE SCHEDULE CONDITIONS

- A. Within thirty (30) days of the effective date of this permit, provide the anticipated construction date of all of the proposed container storage area and tank systems. If the anticipated construction date is more than 365 days from the effective date of this permit, provide an annual update by December 31 of each year regarding the status of these units until completion of Conditions VII. B and C below.
- B. For the proposed container storage areas for solids only (Area 4 South Pad and Area 5 North Pad), and for solids and liquids (Area 5 Cylinder Room and Area 9), the Permittee must comply with the following:
1. Fifteen (15) days prior to beginning construction, notify IDEM of the intended construction start date.
 2. Within fifteen (15) days of completion of construction of each container storage area and its secondary containment system, as applicable, submit to IDEM a letter, pursuant to Permit Condition I.D.11, confirming that the container storage area was constructed in accordance with Attachment D of this Permit.
 3. The Permittee may begin storing hazardous waste in these container storage areas, and the maximum permitted capacity for the storage of free liquids in containers will be increased as per the following table if:
 - a. the Permittee has received approval from IDEM on the installation of the container storage area and the applicable secondary containment system, or
 - b. fifteen (15) days has passed since the submittal of the letter specified in Condition VII. B.2 without any indication from IDEM of its plans to inspect or request for additional information on the container storage area and its secondary containment system.

Container Storage Area	Solids (gallons)	Solids & Liquids (gallons)
Area 4 South Pad	14,080	0
Area 5 North Pad	10,560	0
Area 5 Cylinder Room		600
Area 9		17,600

3. Transportation Costs (e.g., how many trucks, distance traveled, cost/mile)

Alternatively, the Permittee may support the closure cost estimate using the EPA's CostPro Software version 6.0 or greater. If using CostPro, provide an electronic copy of the CostPro computer file (*.cstpro) generated for Tradebe.

- E. Within sixty (60) days of the issuance of this permit, submit updated financial assurance documentation to IDEM for approval. IDEM may grant an extension for updating the financial assurance, if documentation submitted in compliance with Condition VII. D has been submitted to IDEM for approval.
- F. Within ninety (90) days, submit the following support documentation to allow for an exemption from Subpart AA requirements:
1. Certification stating that the regulated item:
 - a. is in compliance with applicable regulations under Part 60, Part 61, or Part 63 of the Clean Air Act (CAA); and,
 - b. air emissions are controlled through installation of a control device as required under the applicable CAA regulations.
 2. Identification number of each regulated item.
 3. A list of applicable regulations under Part 60, Part 61, or Part 63 of the CAA for the regulated item.
 4. A summary of how the permittee complies with the applicable regulations under Part 60, Part 61, or Part 63 of the CAA for the regulated item.
 5. Copies of all records and other documentation required specifically by the 40 CFR Part 60, Part 61, or Part 63 regulations to document or demonstrate that the unit, process vent, or equipment component is currently in compliance through use of the appropriate emission control equipment or work practices.

- C. For the proposed tanks (Tank 5R-1 and 5D-1), the Permittee must comply with the following:
1. Fifteen (15) days prior to beginning construction, notify IDEM of the intended construction start date.
 2. Within fifteen (15) days of completion of construction/installation of each of the tank systems, submit to IDEM a letter, pursuant to Permit Condition I.D.11, confirming that the tank system has been installed in accordance with Attachment D of this Permit, along with tank tightness testing report as per 40 CFR 264.192(d).
 3. The Permittee may begin storing/treating liquids in the tank system, and the maximum permitted capacity for the storage of wastes in tanks will be increased per the following table if:
 - a. Tradebe has received approval from IDEM on the installation and tightness testing of tank system, or
 - b. fifteen (15) days has passed since the submittal of the letter specified in Condition VII. C.2 without any indication from IDEM of its plans to inspect or request for additional information on the tank system.

Tank	Capacity (gallons)
5R-1	250
5D-1	2,250

- D. Within thirty (30) days of the issuance of this permit, submit to IDEM for approval supporting documentation to demonstrate that the closure cost estimates in Attachment I of this permit are adequate for closure by a third party. The closure cost estimates must show how the following items were determined:
1. Quantities of
 - a. Wastes types (e.g., containerized liquids, Haz – Liquid Aerosols)
 - b. Decontamination fluids (e.g., gals/ft² x area decontaminated)
 - c. Sample Analysis (e.g., X samples/area x Y areas)
 2. Disposal Cost/Unit (e.g., third party costs)



Environmental Technology Council

By Certified U.S. Mail

Electronic copy of this letter available at:

<http://etc.org/media/7229/ETC-Letter-to-Cynthia-Giles-re-TDUs.pdf>

1112 16th Street, NW
Suite 420
Washington, DC 20036
Tel: (202) 783-0870
Fax: (202) 737-2038
www.etc.org

July 29, 2016

Ms. Cynthia Giles, Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency (Mail Code 2201A)
1200 Pennsylvania Ave. NW
Washington, DC 20460

Re: Request For A Meeting To Discuss Inconsistent Compliance
For Thermal Desorption Units That Process Hazardous Waste

Dear Ms. Giles:

The Environmental Technology Council, the trade association for the hazardous waste management industry, requests a meeting to discuss inconsistent enforcement and compliance policies being applied by different EPA regional offices to so-called Thermal Desorption Units (TDUs) that are used to thermally destroy hazardous wastes. Due to the significance of this matter, a meeting is requested at your earliest opportunity so that we can discuss measures to better insure enforcement consistency for the hazardous waste industry.

Who we are

The Environmental Technology Council (ETC) is a national trade association whose mission is "to promote the protection of public health and the environment through the adoption of environmentally sound procedures and technologies for recycling and detoxifying industrial wastes and by-products and properly managing and disposing of wastes and waste residues." See www.etc.org. Consistent with this mission, ETC members have a substantial interest in insuring consistency on how environmental compliance requirements are applied within our industry.

Why we've contacted you

ETC understands that the Office of Enforcement and Compliance Assurance (OECA) will address pollution problems that impact American communities through vigorous civil and criminal enforcement that targets the most serious water, air and chemical hazards. As part of this mission, OECA works to advance environmental justice by protecting communities most vulnerable to pollution. Due to the human health risks and environmental justice concerns of burning hazardous wastes in TDUs without a permit under the Resource Conservation and Recovery Act (RCRA), ETC believes that OECA should be briefed on the serious matter.

Who this matter concerns

Tradebe Treatment and Recycling, LLC (“Tradebe”), located at 4343 Kennedy Avenue, East Chicago, Indiana, owns and operates two TDUs that process significant volumes of hazardous waste. Tradebe’s overall operations include hazardous waste fuel blending, lab pack depacking and bulking, tank storage and treatment, and container storage, all of which are subject to RCRA Permit USEPA ID # IND 000646943. However, the two TDUs for thermally destroying hazardous wastes are allegedly “exempted” from the company’s RCRA permit. Tradebe uses the TDUs to treat an extensive list of hazardous wastes such as “paint waste, solvent soaked rags, resins, polymers, plastics, production debris, and discarded commercial chemicals” as advertised in their own sales brochure (Attachment A hereto). As EPA is aware, the term “treatment” is broadly defined in RCRA to include “any method, technique, or process” that is designed to change “the physical, chemical, or biological character or composition of any hazardous waste.” The Tradebe TDUs are engaged in thermal destruction of a significant portion of the hazardous waste feed to those units in addition to desorbing some organic compounds for recovery. By statute and regulation, any “person owning or operating an existing facility ... for the treatment, storage, or disposal of hazardous waste” must have a permit issued under RCRA. 40 C.F.R. § 270.1(b).

Tradebe’s TDUs have a combined total maximum throughput rate of 78,000 tons of hazardous waste per year, which is comparable to a large, commercial RCRA-permitted incinerator.

Inconsistent enforcement between EPA Region 5 and other EPA regional offices

EPA Region 5 has not required Tradebe to include the TDUs within the company’s current RCRA permit and has not taken any enforcement action with respect to the ongoing thermal destruction of hazardous wastes in those units. In contrast, in 2008 EPA Region 6 pursued an enforcement action against Rineco Chemical Industries in Benton, Arkansas, for thermal destruction of hazardous wastes in a TDU without a RCRA permit. The Federal district court agreed with Region 6 and ordered Rineco to obtain a RCRA permit or cease its TDU operations. *United States v. Rineco Chemical Industries, Inc.*, 2009 WL 801608 (E.D. Ark. 2009) (Attachment B). Likewise, EPA Region 6 entered into a Consent Agreement and Final Order with US Ecology Texas, Inc. and TD*X Associates L.P. to require a RCRA permit for thermal destruction of hazardous wastes in a TDU. [https://yosemite.epa.gov/OA/RHC/EPAAdmin.nsf/Filings/77636784A15FA1CC85257E05001BBF43/\\$File/usecology2.pdf](https://yosemite.epa.gov/OA/RHC/EPAAdmin.nsf/Filings/77636784A15FA1CC85257E05001BBF43/$File/usecology2.pdf). Recently, EPA Region 6 submitted comments on a draft RCRA permit for two TDUs to be operated by Chemical Waste Management in Carlyss, Louisiana, confirming that the RCRA permit should include controls similar to a hazardous waste incinerator (Attachment C).

The positions of EPA Region 5 and EPA Region 6 with respect to RCRA permits and enforcement for TDUs that thermally destroy hazardous wastes means that human health and environmental protection depends on the region where a TDU is located, not on consistent EPA enforcement and compliance. The conflicting positions of EPA Region 5 and Region 6 also create an unlevel regulatory program for the hazardous waste industry.

Thermal destruction of hazardous waste in TDUs

There can be no doubt that the Tradebe TDUs are engaged in the thermal destruction of a significant portion of the hazardous waste feed, even if they are also engaged in some recovery of liquid organics through desorption. The fact that the TDUs are used to recover organics does not exempt the thermal destruction of hazardous wastes from RCRA requirements. Thermal destruction is demonstrated by the following:

1. A mass balance of the hazardous wastes fed to the Tradebe TDUs compared to the recovered organics, metal, and other residuals, reveals that a significant volume of waste feed is thermally disposed. The court in *U.S. v. Rineco* used this mass balance test to determine that Rineco's TDU was engaged in unregulated thermal destruction in violation of RCRA. The court used Rineco's own documentation to show that a substantial percentage of waste fed to the unit "was unaccounted for, i.e., disposed of, burned, or incinerated in the treatment process". 2009 WL 801608 at 9. Per Tradebe's own advertising brochure (Attachment A), Tradebe processes 36,000 tons of hazardous waste per year in the TDUs and recovers only 7,000 tons of scrap metal and 10,200 tons of solvent. Even accounting for an estimated 10,000 tons of other residuals, primarily water and char, only 27,000 tons of hazardous waste feed can be accounted for on a mass balance basis. That means that at least 9,000 tons of hazardous waste, or 25% of the waste feed, is thermally destroyed in the TDUs per year without a RCRA permit.
2. There are no controls on the hazardous wastes that are fed to the TDUs, and the feed is not restricted to wastes with recoverable hydrocarbons. According to Tradebe, the TDUs can accept a broad range of hazardous wastes including paint waste, rags, resins, polymers, plastics, production debris, and discarded commercial chemicals. Many other types of hazardous wastes are available on-site and no permit or other restrictions apply to the waste feed. It is essential for a RCRA-regulated thermal treatment facility to restrict the composition of the feed so that emissions of hazardous chemical compounds do not exceed prescribed emission limits. A RCRA permit is required so that appropriate feed limits can be established for the TDUs. This is particularly important because, while some of these wastes may yield organics for recovery, the remaining waste materials are thermally destroyed in the TDUs' heated rotating drums, while non-condensable gases are burned in flares that are an integral part of the disposal operation.
3. There are no operating parameter limits on temperature, oxygen, or other conditions to assure that emissions are controlled. Tradebe claims that the TDUs are operated in an "anaerobic atmosphere," but there are no permit limits or other restrictions on oxygen concentration and no public monitoring reports. EPA has stated in technical papers that oxygen levels in thermal desorption units must be maintained at less than 2 percent to limit combustion *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites, Chapter VI: Low-Temperature Thermal Desorption* (EPA 510-B-95-007). Only through the engineering review and comprehensive performance testing that are part of a RCRA permit can appropriate operating parameter limits (OPLs) be established for the TDUs to assure

continuing compliance with emission limits. Currently no permit limits or other regulatory controls address these parameters.

4. The fact that the TDUs produce a large volume of char demonstrates that RCRA-regulated thermal destruction is occurring. EPA asserted in the Rineco case, and the court agreed, that the fact that the Rineco TDU produced a residual char for disposal “indicates that the destruction of organic materials takes place” *U.S. v. Rineco*, 2009 WL 801608 at 9. Likewise, the Tradebe TDUs produce a substantial volume of char, which alone is conclusive evidence that thermal destruction of hazardous wastes is occurring. According to a state inspection report, Tradebe generates approximately 10 to 13 roll-offs of char from the TDUs per week depending upon operations. IDEM Inspection Report (Jan. 7, 2016), IDEM Doc. # 80205392. The char itself must be classified as a hazardous waste under EPA’s derived-from rule because it is generated from the treatment and disposal of listed hazardous wastes. 40 CFR §261.3(c). Therefore, the char must meet the treatment standards in 40 CFR Part 268 applicable to the hazardous wastes that are thermally destroyed in the TDUs prior to land disposal in a RCRA-permitted landfill. Based upon information and belief, Tradebe disposes of char at landfills without meeting the treatment standards and land disposal prohibitions of RCRA.
5. The TDUs vent non-condensed hazardous waste gases to flares for combustion as an integral part of their operation, classifying the entire unit as RCRA-regulated thermal treatment. A significant portion of the gas stream from processing hazardous wastes in the TDUs is not recovered, but instead is directed as a non-condensed gas to flares where it is burned. The flares are enclosed devices that use “controlled flame combustion” to destroy organics and therefore are engaged in incineration. The Tradebe TDUs are designed to intentionally drive volatile gases off the hazardous waste and then use the flares as an integral part of the process to combust those gases which are non-condensable. That is different from other units (e.g., tanks) that use flares to control gases which are incidental and not deliberately formed as a primary element of their operation. The court in *U.S. v. Rineco* found that venting of vapor/inerts to a similar TDU constituted “burning and incineration” in violation of RCRA. 2009 WL 801608 at 9. No emission limits for hazardous air pollutants, such as dioxin/furans, hydrochloric acid, mercury and other listed toxic metals apply to the Tradebe TDUs’ flare emissions. In fact, Tradebe’s Title V Permit only requires that the flares achieve a destruction and removal efficiency (DRE) of 98 percent. RCRA regulations, on the other hand, require that the incineration of hazardous wastes achieve a DRE of 99.99%. 40 CFR § 264.343(a)(1). Thus, the Tradebe TDUs may emit hazardous air pollutants at an amount more than two orders of magnitude greater than regulatory standards and a RCRA permit would allow.

Based on all the foregoing, Tradebe is engaged in the RCRA-regulated thermal destruction of hazardous wastes in the TDUs, and the land disposal of residual char that is a derived-from hazardous waste, in violation of the permitting requirements, air emission standards, and regulatory conditions of RCRA.

Tradebe's TDUs do not qualify for the "recycling process" exemption

Contrary to Tradebe's customer brochures, the TDUs do not qualify for the exemption from RCRA regulations as a "recycling process" under 40 CFR § 261.6(c)(1). First, even assuming the exemption was available for the recovery of organics, the exemption cannot extend to the aspect of the TDU operation that involves the thermal destruction of hazardous wastes. Some recovery of organics does not mean that the substantial treatment and thermal destruction of hazardous wastes in the TDUs is exempt from RCRA permit requirements.

This is exactly what the court ruled in the Rineco case. The court found that the Rineco TDU did not qualify for the recycling exemption in § 261.6(c)(1) "because substantial hazardous wastes that are treated in the [unit] are destroyed by thermal treatment and not recycled in the [unit]." 2009 WL 801608 at 8. The court cited EPA's own explanation in a regulatory preamble:

[W]e wish to clarify that materials being burned in... thermal treatment devices... are considered to be abandoned by being burned or incinerated under §261.2(a)(1)(ii), whether or not energy or material recovery also occurs.... In our view, any such burning ... is waste destruction subject to regulation either under Subpart O of Part 264 or Subpart O and P of Part 265. If energy or material recovery occurs, it is ancillary to the purpose of the unit – to destroy wastes by means of thermal treatment – and so does not alter the regulatory status of the device or the activity [2009 WL 801608 at 8, quoting 48 Fed. Reg. 14472, 14484 (1983) (internal quotes omitted)].

As described above, at least 25 percent of the hazardous waste feed to the Tradebe TDUs is disposed by thermal treatment, and "any such burning" is RCRA-regulated thermal treatment that does not qualify for the § 261.6(c)(1) exemption.

Second, a major part of Tradebe's business is the blending and processing of hazardous wastes into fuels for burning in cement kilns. Tradebe itself admits that the oil, char, and other residuals from the TDUs are directed into their fuel blending operations. For example, Tradebe's brochures states: "After processing [in the TDUs], a portion of the residual material can be beneficially used in energy recovery." Tradebe Brochure, Attachment D, p.2. However, EPA's regulations are clear that hazardous wastes are not subject to the recycling exemption but are regulated under RCRA permit requirements when "burned for energy recovery in boilers and industrial furnaces [BIFs]" 40 CFR §261.6(a)(2). Because Tradebe processes hazardous wastes in the TDUs and then uses the residuals to produce fuels that are "burned for energy recovery" in cement kilns, the exemption from RCRA permitting for recycling operations is not available.

This was another major holding in the Rineco case. The court carefully analyzed the regulatory language in § 261.6, finding that "recyclable materials, i.e., hazardous wastes burned for energy recovery in BIFs" are not subject to the recycling process exemption, "but instead are regulated under Subparts C through H of Part 266." 2009 WL 801608 at 6. Under Subpart H, "[o]wners and operators of facilities that store or treat hazardous waste that is burned in a boiler or industrial furnace are subject to the applicable provisions of Sections 264, 265, and 270 of this

regulation.” *Id.* The Subpart H regulations provide that “[t]hese standards apply to storage and treatment by the burner as well as to storage and treatment facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner.” *Id.* (emphasis added).

Just like Rineco, Tradebe is an intermediary fuel blender that treats hazardous wastes in the TDUs that are then blended and burned for energy recovery in BIFs. Therefore, the exemption set forth in §261.6(c)(1) for recycling processes is inapplicable to Tradebe.

As the court ruled in the Rineco case, a contrary ruling would mean:

[A]ny hazardous waste treatment unit that processed an incidental amount of recovered material that is not burned for energy recovery would qualify for the recycling exemption. Such an interpretation is contrary to the regulations and RCRA’s purpose to ensure the proper treatment, storage and disposal of hazardous waste so as to minimize the present and future threat to human health and the environment” 2009 WL 801608 at 8.

EPA Region 6 Determination Letter

The Rineco case resulted from an enforcement action taken by EPA Region 6. In addition, EPA Region 6 recently issued a letter of clarification on May 2, 2016, regarding the hazardous waste regulatory standards for TDUs installed at RCRA treatment, storage and disposal facilities (TSDFs) (Attachment E). This letter states in part:

If a TDU combusts all or a portion of the vent gas, combustion of the TDU vent gas from RCRA hazardous waste or recyclable materials [40 C.F.R. §261.6(a)(1)] is considered thermal treatment that is regulated by RCRA. The material being treated (oil-bearing hazardous waste) is already a hazardous waste. Heating hazardous wastes to a gaseous state is subject to regulation under RCRA as treatment of hazardous waste, and thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA. 54 Fed. Reg. 50968, 50973 (December 11, 1989). Thus, thermal treatment of the vent gas requires a RCRA permit.

If the vent gas is combusted in the combustion chamber of the TDU, then a permit under 40 C.F.R. Part 264, Subpart O is required, because the TDU would meet the definition of incinerator in 40 C.F.R. §260.10 (an enclosed device that uses controlled flame combustion). If, on the other hand, the vent gas is vented to and combusted in a thermal oxidizing unit (TOU), the permitting authority may be able to permit the entire unit (TDU and TOU) as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X. A RCRA permit would be required even if the facility is operating as a RCRA exempt recycling activity under 40 C.F.R. §261.6(a)(3)(iv)(C). If the permitting authority decides to issue a 40 C.F.R. Part 264, Subpart X permit, the permitting authority is required to include in the

permit requirements from 40 C.F.R. Part 264, Subparts I through O, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146 that are appropriate for the miscellaneous unit being permitted as required in 40 C.F.R. §264.601.

In short, the Region 6 letter clearly states that TDUs which are combusting all or a portion of the TDU vent gas are required to obtain a RCRA permit for such treatment units, and they are required to comply with the HWC MACT in addition to other standards.

Previous efforts to obtain EPA review and action

This letter is not the first attempt that we have made to prompt EPA into enacting a consistent compliance policy towards TDUs like the Tradebe units. In 2006, ETC submitted letters to the Indiana Department of Environmental Management (IDEM) and EPA Region 5 objecting to the apparent RCRA-exempt recycling status of the initial TDU at the Tradebe facility (then operated by Pollution Control Industries, Tradebe's predecessor corporation). In 2010, ETC again submitted a letter to EPA Region 5 seeking a determination on PCI's claim that the TDU was an exempt unit. During 2014, ETC learned that Tradebe was installing a second TDU and in 2015 ETC submitted adverse comments to Region 5 and IDEM on their draft air permit modification which would allow the new TDU to operate. IDEM issued a final air permit modification approval to Tradebe, ignoring ETC's comments, and Region 5 issued its decision in support of IDEM's approval. Consequently, on June 12, 2015, ETC filed a Clean Air Act petition under 40 CFR § 70.8 with Region 5, objecting to the issuance of the air permit modification to Tradebe. To date, more than a year later, EPA Region 5 has not responded to the ETC petition.

Notice of intent to file a RCRA Citizen Suit

After greater than 10 years, ETC is now running out of options to encourage Region 5 to regulate the Tradebe TDUs in a manner consistent with other hazardous waste processing TDUs (i.e., insure they are RCRA permitted and comply with the HWC MACT standards). A legal option that ETC has considered is to submit a citizen suit notice letter under RCRA, 42 U.S.C. § 6972(a), of intent to file suit against the Administrator for failure to perform her non-discretionary duties and against Tradebe for violation of the requirement to obtain a RCRA permit for treatment and disposal of hazardous wastes in its TDUs. Last year the Hoosier Environmental Council (HEC), an environmental group in Indiana, conducted the first comprehensive assessment of environmental justice in the East Chicago, Indiana, region where the Tradebe facility is located, documenting that the community has "long suffered a hugely disproportionate share of Indiana's pollution burden" *Assessment of Environmental Justice Needs In Northern Lake County Communities*, <http://www.hecweb.org/wp-content/uploads/2010/04/HEC-Assessment-of-EJ-Needs-in-Northern-Lake-County-Communities-FINAL-REPORT2.pdf>, at p. 6. If the Tradebe TDUs were required to obtain a RCRA permit, the East Chicago community would have an opportunity for their environmental justice concerns to be taken into account pursuant to EPA's published guidance on consideration of environmental justice in permitting.

In an attempt to avoid the need to pursue a RCRA citizen suit, ETC is now requesting a meeting with you and your senior staff as a final measure in the hopes of trying to initiate concrete actions that would bring Tradebe into the same permitting and regulatory compliance protocols that other commercial TDUs must meet.

In conclusion, I intend to follow-up with you to set up the requested meeting so that we can discuss actions that will resolve our concerns, while ensuring a consistent compliance policy by EPA with regards to hazardous waste TDUs.

Respectfully submitted,



David Case
Executive Director and General Counsel
Environmental Technology Council
1112 16th Street, N.W., Suite 420
Washington, DC 20036
(202) 783-0870 ext. 201
Email: dcase@etc.org

SOLIDS DISTILLATION SYSTEM (SDS)

Attachment A

About SDS Technology

TRADEBE's Solids Distillation System (SDS), is a positive step forward in sustainable waste recycling technology.

SDS offers generators an effective and cost-efficient method for recycling organic solid waste that might otherwise be disposed of.

Prior to SDS technology, most organic hazardous waste solids were incinerated in a process designed to destroy the organic content by driving off volatiles and burning excess gases.

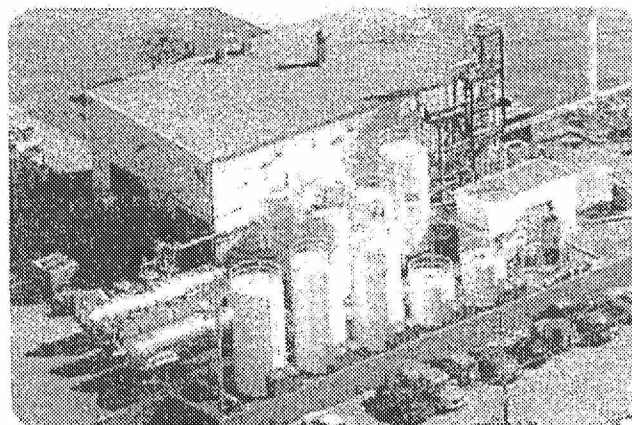
Alternatively, SDS extracts the organics from hazardous waste solids to recover a viable product.

SDS recycled products are used now in numerous industries throughout the US in place of virgin chemicals.

SDS is a multi-stage process including waste container conveyance and shredding, indirect thermal desorption, scrap metal recycling and distillation of recovered organic liquids.

Wastes suitable for SDS include:

- Paints, Resins, Polymers
- Solvent-soaked bags and filters
- Organic liquids



TRADEBE's SDS operations in East Chicago, IN



TRADEBE introduced the original SDS technology in 2004 to address the growing need for recycling of hazardous wastes.

Due to growing demands of the industrial waste market, TRADEBE designed and built a second SDS unit during 2014-2015. This additional unit is SDS².

SDS² enhanced technology, with new safety standards, offers the same environmental benefits as the original SDS unit; with twice the capacity to produce a quality reclaimed product.



Contact Details:

Phone: (800) 388-7242 Nationwide
(888) 276-0887 Northeast & 24-hour Emergency Response

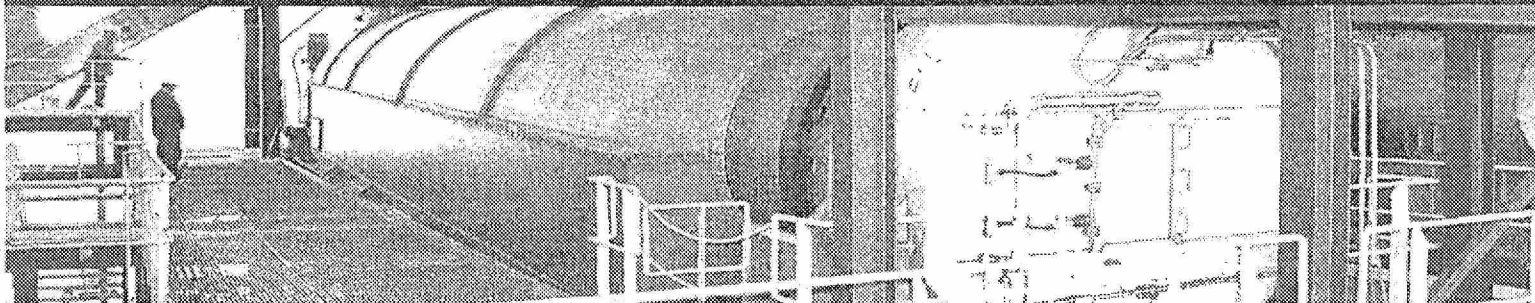
Email: us.cs@tradebe.com Web: www.tradebeusa.com



TRADEBE

Sustainability at Work

SDS² - Sustainable Waste Recycling



SDS² Benefits

True Recycling Technology

The hazardous waste processed through SDS is recycled - receiving the waste management handling code H020, Solvents Recovery (distillation, extraction); and may be eligible for recycling credits with state regulatory agencies.

Versatility

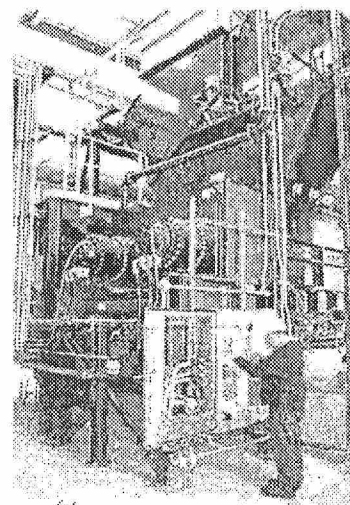
Waste can be received in various size containers from small cans to cubic yard boxes. Metal, plastic and fiber drums are processed with equal efficiency, eliminating costly and potentially unsafe handling and repackaging on site at generator locations.

Reliability

With the addition of the SDS² unit, the SDS total production capacity has increased from 12,000 tons per year to 36,000 tons per year.

SDS² Facts

- ✓ SDS promotes recycling, reclamation and reuse.
- ✓ SDS reclaims valuable constituents found in solid hazardous waste and reduces the demand for virgin chemicals.
- ✓ SDS conserves energy while keeping waste out of the environment.

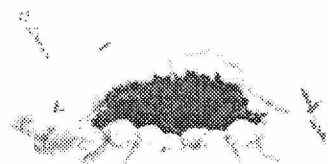


SDS Annual Stats

Scrap Metal Reclaimed : 7,000+ Tons

Solvents Recycled for Reuse : 2,750,000+ Gals

SDS Haz Waste Received & Processed : 36,000+ Tons



Scan to Watch SDS Now >



How are we doing?

Please visit us online to take our client satisfaction survey:
www.tradebeusa.com/survey



TRADEBE

Sustainability at Work

2009 WL 801608

Only the Westlaw citation is currently available.
United States District Court,
E.D. Arkansas,
Western Division.

UNITED STATES of America, Plaintiff,
v.
RINECO CHEMICAL
INDUSTRIES, INC., Defendant.

No. 4:07cv001189 SWW.

March 4, 2009.

West KeySummary

1 Environmental Law

Permits, Licenses, and Approvals

Hazardous waste facility through its activities in recycling metals that contained hazardous waste materials was not eligible for the recycling process exemption and the facility was, therefore, operating in violation of the Resource Conservation and Recovery Act ("RCRA") by its failure to obtain the required permit. The facility argued that because the material it recycled was metal and the metal was never burned for energy recovery that the regulation did not apply. However, a substantial percentage of oil and char resulting from the metal reclamation process was blended into hazardous waste derived fuel ("HWDF") and sold to boiler and industrial furnaces ("BIFs") where it was burned for energy recovery. Thus, the facility was considered an intermediary fuel blender that was subject to the permit requirements of the RCRA. Solid Waste Disposal Act, § 3005(a), 42 U.S.C.A. § 6925(a); APCEC Regulation No. 23, §§ 261.6 (a) and (c), 270.1.

Cases that cite this headnote

Attorneys and Law Firms

Richard Gladstein, Ronald J. Tenpas, Anita M. Scott, U.S. Department of Justice, Environmental Enforcement, Washington, DC, Terry Sykes, U.S. Environmental Protection Agency, Dallas, TX, for Plaintiff.

Heather M. Corken, Jeffrey D. Palmer, Fulbright & Jaworski, Houston, TX, Kevin A. Crass, Friday, Eldredge & Clark, LLP, Little Rock, AR, for Defendant.

MEMORANDUM AND ORDER

SUSAN WEBBER WRIGHT, District Judge.

*1 The United States of America brings this civil action against Rineco Chemical Industries, Inc. ("Rineco") under the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§ 6901 *et seq.* The United States seeks injunctive relief and civil penalties against Rineco for violations of RCRA Sections 3005(a) and 3010, 42 U.S.C. §§ 6925(a) and 6930, and Arkansas Pollution Control and Ecology Commission ("APCEC") Regulation No. 23, which incorporates federal regulations approved by the Environmental Protection Agency ("EPA") pursuant to RCRA that are part of the federally-enforceable State hazardous waste program relating to the generation, transportation, treatment, storage, handling, and disposal of hazardous waste.

Now before the Court are cross-motions of the parties for summary judgment [doc. # 's 13, 40] to which responses and replies have been filed. The Court held a hearing on these motions at the request of Rineco on September 4, 2008, and the matter is now ripe for decision. For the reasons that follow, the Court grants the United States' motion for summary judgment [doc. # 40] and denies Rineco's motion for summary judgment [doc. # 13].¹

I.

A.

RCRA is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid waste. *Meghrig v. KFC Western, Inc.*, 516 U.S. 479, 483, 116 S.Ct. 1251, 134 L.Ed.2d 121 (1996) (citation omitted).

RCRA's primary purpose is to reduce the generation of hazardous waste and to ensure the proper treatment, storage, and disposal of that waste which is nonetheless generated "so as to minimize the present and future threat to human health and the environment." *Id.* (quoting 42 U.S.C. § 6902(b)).

RCRA's Subtitle C, 42 U.S.C. §§ 6921 *et seq.*, establishes a "cradle-to-grave" regulatory system for the treatment, storage and disposal of hazardous wastes. *Cement Kiln Recycling Coalition v. E.P.A.*, 493 F.3d 207, 211 (C.A.D.C.2007) (citations and internal quotation marks omitted). This system operates through a combination of national standards established by EPA regulations, and a permit program in which permitting authorities—either EPA or states that have hazardous waste programs authorized by EPA—apply those national standards to particular facilities. *Id.*

Permits are generally required under RCRA for any facility that engages in the treatment, storage, or disposal of hazardous waste. *United States v. Manning*, 434 F.Supp.2d 988, 998 (E.D.Wash.2006). Section 3005(a) of RCRA, 42 U.S.C. § 6925, establishes a case-by-case permitting process. *Cement Kiln Recycling Coalition*, 493 F.3d at 211-12. Section 3005(a) directs EPA to promulgate regulations requiring each person owning or operating an existing facility that engages in the treatment, storage, or disposal of hazardous waste, or planning to construct a new facility that engages in the treatment, storage, or disposal of hazardous waste to have a permit pursuant to this section. *Id.* at 212 (quoting 42 U.S.C. § 6925(a)). Pursuant to Section 3005(a), EPA promulgated regulation 40 C.F.R. § 270.1(b), which provides that "[s]ix months after the initial promulgation of the part 261 regulations [Identification and Listing of Hazardous Waste], treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a RCRA permit is prohibited." *See also United States v. Heuer*, 4 F.3d 723, 730 (9th Cir.1993) ("It is fundamental that an entity which performs a hazardous waste activity for which a permit is required under RCRA may not legally perform that activity unless it has a permit for the relevant activity").

*2 As indicated previously, pursuant to RCRA subsection 3006(b), EPA may authorize a state to administer and enforce its own hazardous waste program, so long as the state program is equivalent to and consistent

with EPA's program and provides adequate compliance and enforcement measures. 42 U.S.C. § 6926(b). When a state obtains such authorization, the state hazardous waste program operates "in lieu" of the federal program. *Id.*

The State of Arkansas received final authorization to enforce its hazardous waste program on January 25, 1985. 40 C.F.R. § 272.201(a).² The Arkansas Department of Environmental Quality ("ADEQ") is the state agency primarily responsible for carrying out this authority in the State of Arkansas.³ During the time Arkansas has been authorized to administer the RCRA hazardous waste program, facilities in that state have been regulated under the provisions of APCEC Regulation No. 23, which has adopted and incorporated verbatim from the federal RCRA regulations.⁴

Despite having authorized a state to act, EPA frequently files its own enforcement actions against suspected environmental violators, even after the commencement of a state-initiated enforcement action (a process known as overfiling). *Harmon Indus., Inc. v. Browner*, 191 F.3d 894, 898 (8th Cir.1999).⁵ Before initiating any such action, however, RCRA requires that EPA give the authorized state prior notice. RCRA Section 3008(a)(2), 42 U.S.C. § 6928(a)(2).

B.

Rineco owns and operates a facility in Benton, Arkansas that is engaged in the generation, treatment, and storage of hazardous waste. Rineco is the largest single-site hazardous waste fuel blending facility in the United States and receives more than 400 different types of listed and characteristic solid phase and liquid phase hazardous wastes at its facility from a large number of generators of hazardous waste.⁶

Rineco applied for and obtained a permit to operate a hazardous waste management facility at its Benton facility, RCRA Permit No. 28H-M001. Located at this facility is a Thermal Metal Wash Recycling Unit ("TMW"). The TMW is protected by Rineco Patent No. 7,341,155 B2 ("Patent"), which "relates generally to waste processing, and more particularly to systems and methods

for processing heterogeneous waste materials." As noted in the Patent,

[i]ndustry produces large amounts of waste that must be processed and disposed of by waste operators. Most of this waste is heterogeneous waste, which includes liquids and solids, which is friable and non-friable, which melts at various temperatures, has various solidification temperatures, low auto-ignition temperatures, and high vapor pressure. The waste material also includes ferrous and non-ferrous metals in a wide range of sizes. This waste is often categorized by applicable environmental regulations as "hazardous waste" because of its flammable, corrosive, or toxic nature. Thus, the disposal of such waste is heavily regulated by environmental regulations.

*3 There are inefficiencies associated with currently-available processes for disposing of industrial waste. Thus, a heretofore unaddressed need exists in the industry for systems and methods of processing waste materials.

The original TMW began operation in June 2003 and ceased operation in July 2004. The current TMW commenced operation in March 2005. The operation of both the original and the new TMW are similar, the main difference being, states Rineco, that the external heat source for the original TMW was natural gas while the external heat source for the new TMW is electricity and circulating hot oil.

The operation of the TMW, which does not have a RCRA permit, is at the center of the United States' claims in this action. The United States claims the primary purpose of the TMW is to convert a chemical soup of hazardous waste streams into hazardous waste derived fuel ("HWDF") for sale to boiler and industrial furnaces ("BIFs"), an activity it claims requires a RCRA permit. Rineco, however, claims the TMW is designed to recycle metal from hazardous and non-hazardous materials, an activity it claims is exempt from regulation and does not require a RCRA permit.

Prior to constructing the TMW at its facility, Rineco inquired of ADEQ concerning the TMW's permitting requirements. By letter dated January 10, 2003, ADEQ informed Rineco that it had made a regulatory determination regarding the TMW based on the following assumptions:

- The unit's intended purpose is to recycle metal contaminated with hazardous waste and recover scrap metal from Rineco's waste stream.
- No scrap metal from this unit will be blended into Rineco's fuel or otherwise disposed. The scrap metal will be recycled.
- The waste entering the auger contains metal contaminated with hazardous waste.
- The hazardous waste/constituents leaving the process will be handled properly as hazardous waste.
- The auger used in the process does not grind the hazardous waste entering the system; the auger only moves the waste stream.
- This unit is not intended to decontaminate containers.

ADEQ stated that "[b]ased on these assumptions, the processing unit does not require a permit, at this time" but that "the hopper may be considered a storage unit requiring a permit if the waste stream remains in the hopper for any period of time." *Id.* ADEQ went on to state that "[t]his determination is based on information submitted by Rineco for this specific unit for a specific use; the exemption does not apply to a different unit or may not apply if this unit is not utilized as intended, and in accordance with the above assumptions." *Id.*

On February 21, 2003, ADEQ sent a letter to Rineco clarifying at the request of Rineco its position on "scrap metal contaminated with hazardous waste." ADEQ stated that scrap metal, in and of itself, is exempt from hazardous waste regulation. However, ADEQ also stated "when scrap metal is mixed with non-scrap metal material (*i.e.* listed or characteristic hazardous waste), the mixture would not be considered a scrap metal and the entire mixture would be subject to regulation."

*4 By letter dated July 20, 2004, ADEQ informed Rineco that it had reason to believe that the TMW was

not being operated in a manner that conforms to a regulatory based exclusion from hazardous waste management permitting. Based on the information gathered during our investigation and observations we find that the material being processed in the unit is a mixture of hazardous waste and shredded metal.

Therefore, the entire mixture is a hazardous waste. This unit is therefore subject to permitting as a hazardous waste management unit.

This letter shall serve as notice to Rineco that the introduction of hazardous waste to the [TMW] must cease immediately. Operation of the [TMW] that does not strictly conform to the January 10, 2003 and February 21, 2003 letters must be suspended until such time as this issue is resolved.

On July 30, 2004, after meeting with Rineco, Marcus Devine ("Devine"), then-Director of ADEQ, wrote to the company stating that

[t]his letter affirms that the regulatory interpretation provided to Rineco in ADEQ's letters dated January 10 and February 21, 2003, reflect our current position on the issue. Our position, in brief, is that the TMW does not require a Hazardous Waste Management permit provided it is operated in the manner and for the specific purpose that Rineco described in their request for confirmation of this determination. Of course, the assumptions ADEQ stated in the January 10, 2003, letter and further clarified in the February 21, 2003, letter must remain valid, otherwise ADEQ may choose to revisit its position on the regulatory status of the unit.

On January 13, 2005, ADEQ sent a letter to Rineco stating that ADEQ had been informed that the TMW had been removed and, if Rineco had constructed a new TMW, ADEQ had to be officially notified to determine the regulatory status of the new unit. On February 2, 2005, Rineco confirmed that it had revised the TMW and expected the new TMW to be in full production shortly.

On February 9, 2005, Devine wrote to Rineco indicating that he was "disturbed to learn that Rineco has not informed the [ADEQ] staff of the details of this new/ revised process," and that "[t]he regulatory determination by this agency in January 2003 was strictly limited to the unit addressed by the determination letter and limited in

scope based on the nature of the operation as described at the time the determination was made." ADEQ required Rineco to provide a variety of information describing the operation of the revised unit in order to make a regulatory determination.

On March 22-24, 2005, EPA conducted an inspection of the Rineco facility. The purpose of this inspection was to evaluate Rineco's systems and methods for processing waste materials and facility compliance with RCRA. On June 28, 2005, EPA conducted a followup inspection of the Rineco facility because the TMW was not operating during the first inspection. The purpose of the second inspection was to evaluate the incoming and outgoing streams from Rineco's TMW.

*5 Based on the March 22nd-24th and June 28th inspections and documentation provided by Rineco, EPA determined that the TMW is a thermal treatment device that applies heat (over 1000 degrees Fahrenheit) to vaporize hydrocarbons and water and thereby change the physical and chemical composition of the hazardous waste fed into the unit, by separating the waste into six waste streams after treatment in the unit: water, oil, char, metal, vapor, and "inerts."⁷ EPA states that solid and liquid phase wastes are placed in the TMW on a moving conveyor and that materials are then heated in an oxygen-limited chamber using an external heat source to vaporize hydrocarbons and water, and reduce the cohesiveness of the solid and liquid waste material. Vapors are then condensed and cooled, states EPA, and condensed vapors are passed through the oil-water separators to recover liquid hydrocarbons; the recovered hydrocarbons, along with other liquid waste, are transferred to the hydropulper where they are mixed into HWDF. Non-condensable vapors, states EPA, are combined and vented to a thermal oxidation unit ("TOU") for destruction, while solids exit the heated chamber where the materials are cooled, and the cooled material enters a vibratory screen and magnet train that separates the metal from the char. EPA states that the metal is discharged via a conveyor to dump trucks for possible sale and that the char is transferred to the hydropulper where it is mixed, along with the liquid waste, into fuel for sale to BIFs, including cement kilns. The United States argues that the TMW, far from being designed for recycling metal, is an integral part of a fuel blending activity.

Rineco, in turn, states that the TMW is a relatively simple device designed to recycle metal from hazardous and non-hazardous materials. Rineco states that metal-containing materials are placed in the TMW on a moving conveyor and that materials are then heated in an oxygen-depleted chamber via an external heat source to break the adhesive bonds of the materials that are attached to the surface of the metal. By heating the material, states Rineco, the adhesive bonds are broken, and the material separates from the metal. Rineco states the condensable vapors are captured and sent through a series of condensers/scrubbers, which cool the vapors, remove entrained solids, and carry them back in a liquid form, while the solids are sent through a series of cooling screws, vibrating screens, and magnets to further separate the metal from other inert materials. The final product of the TMW, states Rineco, is clean metal, which is sold to third parties, and all of the other separated materials (solids, liquids, and gases) are handled in accordance with RCRA and the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.* With respect to these other separated materials-or output-from the TMW, Rineco acknowledges that the oil and char wind up in cement kilns where they are burned for energy recovery.

*6 Two months after EPA's March 2005 inspection, Devine, on April 12, 2005, stated in a one-sentence letter that "I have determined that the unit at the Rineco facility known as the Thermal Metal Wash Recycling Unit does not require a hazardous waste management permit pursuant to the Arkansas Pollution Control and Ecology Commission Regulation No. 23, § 261.6(c)(1)."⁸ EPA, however, states that a substantial percentage of oil and char resulting from the treatment process in the TMW is blended into HWDF and provided to BIFs where it is burned for energy recovery and that this activity requires a RCRA permit. EPA states Rineco's RCRA Permit No. 38H-M001 does not include the treatment, storage, or disposal activities connected with the TMW, and that it has asked Rineco to apply for a modification of its RCRA permit to include such activities but that Rineco has not done so. This action followed.⁹

II.

The United States asserts five claims for relief in its original complaint concerning operation of the TMW: (1) unauthorized operation of RCRA treatment unit; (2) unauthorized operation of RCRA storage unit; (3)

unauthorized operation of RCRA disposal unit; (4) failure to notify of hazardous waste activity; and (5) failure to provide financial assurances. Rineco moves for summary judgment on each of those claims, its central argument being that the TMW does not require a RCRA permit as the TMW is engaged in the recycling process and, thus exempt from regulation under APCEC Regulation No. 23 § 261.6(c)(1). The United States likewise moves for summary judgment on each of the claims asserted in its original complaint, asserting that two separate grounds entitle it to summary judgment, either of which it states is sufficient for the United States to prevail: first, Rineco's hazardous waste activities are not eligible for the recycling process exemption as a matter of law because, under APCEC Regulation No. 23 § 261.6(a), as an intermediary to a BIF, Rineco is not eligible for the recycling exemption set forth in APCEC Regulation No. 23 § 261.6(c)(1); second, Rineco is not engaged in a recycling activity in the TMW and cannot qualify for the recycling exemption because when waste materials are abandoned by disposal, burning or incineration, they are not recycled. Both parties argue there are no genuine issues of material fact with respect to these issues and that each is entitled to summary judgment as a matter of law.

A.

Summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed.R.Civ.P. 56(c). As a prerequisite to summary judgment, a moving party must demonstrate "an absence of evidence to support the non-moving party's case." *Celotex Corp. v. Catrett*, 477 U.S. 317, 325, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). Once the moving party has properly supported its motion for summary judgment, the nonmoving party must "do more than simply show there is some metaphysical doubt as to the material facts." *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 586, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986). The nonmoving party may not rest on mere allegations or denials of his pleading, but must "come forward with 'specific facts showing that there is a *genuine issue for trial*.'" *Id.* at 587 (quoting Fed.R.Civ.P. 56(c) and adding emphasis). See also *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 256, 106 S.Ct. 2505, 91 L.Ed.2d 202

(1986). The inferences to be drawn from the underlying facts must be viewed in the light most favorable to the party opposing the motion. *Matsushita*, 475 U.S. at 587 (citations omitted). However, “[w]here the record taken as a whole could not lead a rational trier of fact to find for the nonmoving party, there is no ‘genuine issue for trial.’” *Id.* (citation omitted). “Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment.” *Anderson*, 477 U.S. at 248. “Factual disputes that are irrelevant or unnecessary will not be counted.” *Id.*

B.

1.

*7 Addressing first the United States’ claim of unauthorized operation of RCRA treatment unit, the United States alleges that since 2003 Rineco has been an owner or operator of a unit for the treatment of hazardous waste, without a required permit, in violation of section 3005(a) of RCRA, 42 U.S.C. § 6925(a), and APCEC Regulation No. 23 §§ 270.1, 270.10. Rineco, in turn, argues that as a matter of law, Rineco’s TMW is exempt from regulation under APCEC Regulation No. 23 § 261.6(c)(1) and thus operation of the TMW does not require a RCRA permit.

a.

The Court has carefully considered the matter and agrees with the United States that Rineco’s hazardous waste activities are not eligible for the recycling process exemption as a matter of law because, under APCEC Regulation No. 23 § 261.6(a),¹⁰ as an intermediary to a BIF, Rineco is not eligible for the recycling exemption set forth in APCEC Regulation No. 23 § 261.6(c)(1).¹¹ Under § 261.6(a)(2)(ii), recyclable materials, *i.e.* hazardous wastes burned for energy recovery in BIFs, are not subject to the requirements for generators, transporters, and storage facilities listed in §§ 261.6(b) and 261.6(c), but instead are regulated under Subparts C through H of Part 266. Under Subpart H of Part 266, “[o]wners and operators of facilities that store or treat hazardous waste that is burned in a boiler or industrial furnace are subject to the applicable provisions of Sections 264,

265, and 270 of this regulation.” APCEC Regulation No. 23 § 266.101(c)(1). The Subpart H regulations provide that “[t]hese standards apply to storage and treatment by the burner as well as to storage and treatment facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner.” *Id.* Rineco is an intermediary fuel blender that treats hazardous wastes in the TMW that are sold to and burned for energy recovery in BIFs, including cement kilns, which are regulated under Part 266, Subpart H. Thus, the exemption set forth in § 261.6(c)(1) is inapplicable to Rineco.

Rineco concedes that recyclable materials subject to APCEC Regulation No. 23 § 261.6(a) do not qualify for the recycling exemption but argues that § 261.6(a) does not apply in the instant case because Rineco only recycles metal in the TMW. While Rineco admits that a substantial percentage of oil and char resulting from the treatment process in the TMW is blended into HWDF and sent to BIFs where it is burned for energy recovery, Rineco contends that only the percentage of metal resulting from the treatment process should be counted as recyclable materials in assessing whether § 261.6(a) applies and that focusing on the other materials exiting the TMW that are sent for use as fuel is a “red herring.” In support of this argument, Rineco relies on a passage in EPA’s Office of Solid Waste and Emergency Response Memorandum 9521.1994(01), entitled “Regulation of Fuel Blending and Related Treatment and Storage Activities” (the “Guidance”), which provides as follows:

*8 There may be some recycling operations at a fuel blending facility that are exempt from permitting, even though the fuel blending process itself is not exempt. The exemption is only available to units that are solely engaged in permit-exempt recycling; if the reclaimed materials are sometimes sent for use as a fuel, then the recycling unit would be subject to the permitting standards.

Rineco, states that “[a]s the [G]uidance explains, if the reclaimed materials are themselves sometimes sent for use as a fuel, then the recycling unit would be subject to permitting standards (*i.e.* the unit would not “solely” be engaged in recycling activities).” In contrast, states

Rineco, "if the reclaimed materials are *never* sent for use as a fuel, like the reclaimed metal in this case, the recycling unit exemption would apply." Rineco states that because the material recycled in the TMW is metal, and metal recycled in the TMW is never burned for energy recovery, § 261.6(a)(2)(ii) does not apply to metal recycling in the TMW. Consequently, states Rineco, the materials placed into the TMW are subject to the general requirements of APCEC Regulation No. 23 § 261.6, including the recycling unit exemption in § 261.6(c)(1), and the TMW would be exempt from regulation under RCRA.

The Court rejects Rineco's assertion that the word "solely" in the Guidance exclusively refers to the ultimate use of the recycled material and that the focus should be exclusively on the percentage of metal generated from the TMW while ignoring all other outputs from the treatment process. Clearly, metal is not the only material recycled in the TMW, and APCEC Regulation No. 23 § 261.6(a)(2) specifically provides that recyclable materials, *i.e.* hazardous wastes burned for energy recovery in BIFs, are not subject to this section. Rineco points to the word "reclaimed" in the Guidance, but in the preamble to the hazardous waste regulations EPA explained that although "commercial products reclaimed from hazardous wastes are products, not wastes, and so are not subject to the RCRA Subtitle C regulations," waste-derived fuel resulting from the reclamation process continues to be governed by RCRA:

We caution, though, as we did in the proposal, that this principle does not apply to reclaimed materials that are not ordinarily considered to be commercial products, such as waste-waters or stabilized wastes. The provision also does not apply when the output of the reclamation process is burned for energy recovery or placed on the land. These activities are controlled by the provisions of the definition dealing with using hazardous wastes as ingredients in fuel or land-applied products. For instance, if a spent solvent is treated and blended with oil to sell as a fuel, that waste-derived fuel is still subject to RCRA jurisdiction.

50 Fed.Reg. 614, 634 n. 20, Final Rule-Hazardous Waste Management System: Definition of Solid Waste, January 4, 1985.¹² Thus, if reclaimed materials from the TMW are sometimes sent for use as a fuel, as indisputably occurs with oil and char, then the TMW cannot be exempt from the RCRA permitting requirements of Part 266, Subpart H.

*9 There is certainly evidence in the record showing that a substantial percentage of the output from the TMW is not metal, even though the recovery of metal clearly takes place and is one of the purposes of the TMW. While the metal recycled in the TMW is not burned for energy recovery, the deposition testimony of three former Rineco employees (whom Rineco describes as "disgruntled") and certain Rineco documents support the United States' contention that a substantial percentage of oil and char resulting from the treatment process in the TMW is blended into HWDF and sent to BIFs where it is burned for energy recovery. Michael W. Tallent ("Tallent"), a former Rineco Production Chemist, testified that he worked as senior production chemist/warehouse manager when the first TMW was installed at Rineco and that the primary purpose of the TMW was not to recycle metal, but to blend hazardous waste into fuel which was burned for energy recovery at BIFs. Similarly, S. Bradley Cummock ("Cummock"), a former Rineco Director of Operations and who was an employee of Rineco from January 1996 through July 2003, testified that the primary purpose of the TMW, especially from a financial standpoint, was to blend hazardous waste into fuel for cement kilns, not to recycle metal. Brad Patty ("Patty"), the former Rineco Director of Operations after Cummock and who worked as Director of Operations at Rineco from August 2003 to January 2006, also testified that the primary intent of the TMW was to blend hazardous waste into fuel for cement kilns, not to recycle metal.

Certain Rineco documents concerning operation of the TMW corroborate the testimony of Rineco's former Production Chemist and Directors of Operations. Between 2003 and 2008, the annual TMW Mass Balance Reports show that the TMW treatment process produced more than twice as much oil and char as metal. In addition, a TMW Monthly Profit Analysis for the month of January 2006 (which is under seal) shows the percentage of Rineco's profit from the TMW that was derived from metal sales, a percentage that certainly seems inconsistent

with Rineco's claim that the primary purpose of the TMW is to recycle metal. Rineco characterizes its own Mass Balance Reports as "incomplete and inaccurate" and its TMW Monthly Profit Analysis as "incomplete and based on mere speculation," but Rineco cannot create facts issues with its own conflicting assertions.¹³

In sum, the Court determines that Rineco's TMW unit does not qualify for the recycling process exemption set forth in APCEC Regulation No. 23 § 261.6(c)(1) because, under APCEC Regulation No. 23 § 261.6(a)(2) (ii), hazardous wastes that are burned for energy recovery in a BIF (as are the wastes managed in Rineco's TMW unit), are subject to APCEC Regulation No. 23 Part 266, Subpart H. Were the Court to uphold Rineco's interpretation, any hazardous waste treatment unit that processed an incidental amount of recovered material that is not burned for energy recovery would qualify for the recycling exemption. Such an interpretation is contrary to the regulations and RCRA's purpose to ensure the proper treatment, storage and disposal of hazardous waste so as to minimize the present and future threat to human health and the environment. *Meghrig*, 516 U.S. at 483.¹⁴

b.

*10 The Court additionally agrees with the United States that the TMW is not eligible for the recycling exemption for a second reason because substantial hazardous wastes that are treated in the TMW are destroyed by thermal treatment and not recycled in the TMW. With respect to such activity, EPA has stated:

[W]e wish to clarify that materials being burned in incinerators or other thermal treatment devices, other than boilers and industrial furnaces, are considered to be "abandoned by being burned or incinerated" under § 261.2(a)(1)(ii), whether or not energy or material recovery also occurs.... In our view, any such burning (other than in boilers and industrial furnaces) is waste destruction subject to regulation either under Subpart O of Part 264 or Subpart O and P of Part 265. If energy or material recovery occurs, it is ancillary to the purpose of the unit-to destroy wastes by means of thermal treatment-and so does not alter the regulatory status of the device or the activity.

48 Fed.Reg. 14472, 14484, Proposed Rules, April 4, 1983.

Rineco claims that burning cannot occur in the TMW because the "materials are indirectly heated in an oxygen-depleted chamber." Rineco's use of the phrase "oxygen-depleted" is ambiguous, however, and Rineco has provided no actual evidence that oxygen is absent from the TMW. Carl Wikstrom, Director of Research and Development for Rineco, only states that the materials are heated in an "oxygen-depleted chamber via an external heat source to break the adhesive bonds of the materials that are attached to the surface of the metal." In contrast, the TMW Patent indicates that waste materials are placed in an oxygen limited chamber, not an oxygen depleted chamber. The Patent states:

The feed hopper provides the waste material to a first chamber through an airlock. The airlock, for some embodiments, is a knife gate, which largely isolates the first chamber from the feed hopper. The airlock limits air infusion into the first chamber, which is, for some embodiments, a sub-ambient pressure chamber. This isolation removes dependence on a dynamic seal. Also, the improved seals limit or prevent appreciable influx of air into the system, thereby reducing the chances for unplanned oxidation and also reducing the amount of non-condensable gases that flow through the system.... For some embodiments, an inerting gas (e.g. carbon dioxide, nitrogen, etc.) is injected into the airlock to displace air or other oxidizing agents. This reduces the oxidation that can occur in the subsequent stages of the waste processing system.

Rineco's own documentation evidences destruction or burning of materials in the TMW. On December 28, 2005, EPA asked Rineco to "complete the attached table regarding volumes of waste managed at your facility for 2003, 2004 and 2005." EPA provided a table, based on Rineco's description of the TMW, showing yearly volume of hazardous waste received (liquid and solid phases), yearly volume into the TMW, yearly volume from the

TMW divided in six outputs (water, oil, char, metal, vapors and inerts), and yearly volume into and out of the cryogenic unit. In a letter to EPA dated January 17, 2006, Rineco stated that its responses to the table were based on pounds, the numbers provided were Rineco's "best estimate," and the vapor and inerts categories were combined because Rineco was unable to separate them. The United States notes that the table showed that between 2003 and 2005, of the approximately 18.7 million lbs. of waste fed into the TMW annually, more than 2.6 million lbs. or at least 13.9% was unaccounted for, *i.e.* disposed of, burned, or incinerated in the treatment process, and that during the same period approximately 2 million lbs. or 10.7% of the output from the TMW was vapor/inerts, which are vented to the TOU where they are destroyed through burning and incineration. The United States notes as well that the presence of more than 4.4 million lbs. or at least 23.5% char indicates that the destruction of organic materials takes place in the TMW.¹⁵

*11 Rineco does not specifically dispute the above percentages but contends that the table "does not reflect all of the materials exiting the TMW and, thus, any attempt to create a mass-balance report from this information is fatally flawed." Rineco states that "[i]mportantly, the chart does not reflect the amount of solids (other than char and metal) exiting the unit" and that "[t]herefore, the [United States'] allegations that 13.9% of the materials placed into the TMW are destroyed based on the numbers in the January 2006 chart are just plain wrong and misleading to the Court."

As previously noted, Rineco's claim that its table "does not reflect all of the materials exiting the TMW" and that its own Mass Balance Reports "are incomplete and inaccurate" fails to create a genuine issue of material fact concerning the evidence indicating that some 13.9% of the materials are burned or destroyed in the TMW. In its January 17th response to EPA's information request, Rineco made no mention that the six outputs from the TMW did not reflect the total output from the TMW and Rineco did not correct the table to add an output for "solids (other than char and metal) exiting the unit." The United States argues that Rineco clearly did not do so because the "inerts" category on the table describes the same waste materials that Rineco is now calling "solids." Certainly, neither Rineco's Patent nor Rineco's Fuel Blending & Recycling Processes flow chart describe

"solids (other than char and metal) exiting the unit" but they do identify "inerts." The Patent states "[t]he metal separation system handles non-volatile fractions, including char, metal, and nonmagnetic inert substances such as, for example, glass, gravel, soil, sand, etc." and Rineco's flow chart indicates that "char, metal, and inerts" are the only solid phase materials that exit the TMW. There is no separate reference to "solids" exiting the TMW.

In any case, it is undisputed that vapor from the TMW is vented to the TOU where it is destroyed through burning and incineration.¹⁶ Thus, a portion of inputs to the TMW are volatilized by the high temperature, vented to the TOU, and destroyed through burning and incineration. In addition, the presence of substantial char shows that the destruction of organic materials takes place in the TMW.¹⁷ Accordingly, the exemption for the recycling process found at APCEC Regulation No. 23 § 261.6(c)(1) does not apply because certain of the organic hazardous wastes processed in the TMW are not recycled but instead are destroyed by thermal treatment.¹⁸

c.

For the foregoing reasons, the Court grants summary judgment to the United States on its First Claim for Relief under RCRA (Unauthorized Operation of RCRA Treatment Unit) as set forth in its original complaint.

2.

The Court now turns to the United States' claim of unauthorized operation of RCRA treatment unit. The United States alleges that since 2003 Rineco has been an owner or operator of a unit for the storage of hazardous waste, without a required permit, in violation of section 3005(a) of RCRA, 42 U.S.C. § 6925(a), and APCEC Regulation No. 23 §§ 270.1, 270.10. Rineco, however, argues that it has a valid and effective RCRA permit for the storage of hazardous waste at its facility that covers hazardous waste related to the TMW.

*12 Under APCEC Regulation No. 23 § 270.1(b), storage of hazardous waste by any person who has not applied for or received a RCRA permit is prohibited. Under

RCRA section 1004(33), 42 U.S.C. § 6903(33), "[t]he term 'storage,' when used in connection with hazardous waste, means the containment of hazardous waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such hazardous waste." "Storage" is defined as "the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere." APCEC Regulation No. 23 § 260.10.

Rineco does not dispute that it is storing hazardous waste related to the TMW at its facility and it does not dispute that after shredding, waste materials are placed in totes which are stored near the shredders before treatment in the TMW. Rineco obtained its RCRA hazardous waste permit in August 1999 before it began operation of the TMW and the staging area of the totes for the TMW is not included in the existing permit. Thus, Rineco's failure to modify its existing RCRA permit to expressly include the hazardous waste storage areas related to the TMW is a violation of Section 3005(a) of RCRA, 42 U.S.C. § 6925(a), and APCEC Regulation No. 23 §§ 270.1, 270.10.¹⁹ Accordingly, the Court grants summary judgment to the United States on its Second Claim for Relief under RCRA (Unauthorized Operation of RCRA Storage Unit) as set forth in its original complaint.

3.

The Court now turns to the United States' claim of unauthorized operation of RCRA disposal unit. The United States alleges that since 2003 Rineco has been an owner or operator of a unit for the disposal of hazardous waste, without a required permit, in violation of section 3005(a) of RCRA, 42 U.S.C. § 6925(a), and APCEC Regulation No. 23 §§ 270.1, 270.10. Rineco, however, argues that it does not dispose of any hazardous waste related to the TMW at its facility.

As set forth above, Rineco's January 17th table regarding volumes of waste managed at its facility for 2003, 2004 and 2005 shows that Rineco disposes of hazardous waste related to the TMW. Again, Rineco's claim that its table "does not reflect all of the materials exiting the TMW" fails to create a genuine issue of material fact in the face of the evidence indicating that some 13.9% of the materials are burned or destroyed in the TMW. In addition, Rineco does not dispute that vapor, one of the outputs from

the TMW, is vented to the TOU for destruction, nor does Rineco controvert the findings of the recent EPA inspection by Duster or similar testimony from former Rineco employees Tallent, Cummock, and Patty that fugitive VOC air emissions are "leaking" from the TMW and other units at the Rineco facility.

In addition to disposal occurring at the TMW itself, it is not disputed that char and other materials from the TMW are blended into HWDF and sent off-site to BIFs where it is burned and emitted into the atmosphere or disposed or "deposited" as a waste in a landfill after the burning process is completed. Rineco argues that in order for "disposal" to occur, RCRA regulations require that the disposal must take place on the land or water at the Rineco facility. The term "disposal" is not so limited, however, but encompasses "the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters." 42 U.S.C. § 6903(3); APCEC Regulation No. 23 § 260.10. The mere act of sending waste off-site for disposal does not make a unit a disposal unit; rather, Rineco is engaged in the unauthorized operation of a disposal unit because it is incorporating the char into a fuel, and the char is ultimately discharged into the air or deposited in a landfill. Accordingly, the Court grants summary judgment to the United States on its Third Claim for Relief under RCRA (Unauthorized Operation of RCRA Disposal Unit) as set forth in its original complaint.

4.

*13 The Court now turns to the United States' claim of failure to notify of hazardous waste activity. The United States alleges that Rineco has failed to file, with EPA or ADEQ, a notification of hazardous waste activity related to the TMW in compliance with Section 3010 of RCRA, 42 U.S.C. § 6930. Rineco, however, argues it submitted notification of its hazardous waste activity related to the TMW to ADEQ as part of its Hazardous Waste Annual Reports for 2003, 2004, 2005, 2006, and 2007, noting that as to each report, it indicated that the facility was a recycler of hazardous waste, included hazardous wastes recycled in the TMW in the list of regulated hazardous

wastes, and included hazardous wastes recycled in the TMW in the waste generation totals for the facility.

Section 3010 of RCRA requires Rineco to provide notice of the location and a general description of any treatment, storage or disposal activity conducted at the facility. 42 U.S.C. § 6930. Rineco's general reference on the RCRA Subtitle C Site Identification form that it is a recycler of hazardous waste and its reference to the hazardous wastes recycled in the TMW as well as its hazardous waste totals at the facility is not sufficient. Section 3010 requires the operator of a hazardous waste treatment, storage or disposal facility to file specific reports. *McClellan Ecological Seepage Situation v. Perry*, 47 F.3d 325, 329-330 n. 7 (9th Cir.1995). Rineco does not dispute that it has failed to file with EPA or ADEQ a notification of its hazardous waste activity expressly related to the TMW. Accordingly, the Court grants summary judgment to the United States on its Fourth Claim for Relief under RCRA (Failure to Notify of Hazardous Waste Activity) as set forth in its original complaint.

5.

The Court now turns to the United States' claim of failure to provide financial assurances. The United States alleges that Rineco has failed to establish financial assurance requirements for closure of the TMW and related storage units at the facility in violation of section 3004(a) of RCRA, 42 U.S.C. § 6924(a), and APCEC Regulation No. 23 § 264, Subpart H.

Rineco does not dispute that it has failed to establish financial assurances related to the TMW but instead contends that because the TMW is exempt from regulation, Rineco is not required to comply with financial assurances requirements for closure of the TMW. As set forth above, however, Rineco does not qualify for the recycling exemption in APCEC Regulation No. 23 § 261.6(c)(1). As a result, Rineco must establish financial assurances for the TMW.²⁰ Accordingly, the Court grants summary judgment to the United States on its Fifth Claim for Relief under RCRA (Failure to Provide Financial Assurances) as set forth in its original complaint.

C.

One final matter concerns Rineco's affirmative defenses. Rineco argues that if it is not entitled to summary judgment, genuine issues of fact on Rineco's affirmative defenses preclude the granting of summary judgment in favor of the United States, including whether EPA is equitably estopped from asserting claims against Rineco based on the decision of the delegated authority (*i.e.* ADEQ) that the TMW does not require a RCRA permit, whether EPA is exercising selective enforcement against Rineco, and whether Rineco is being denied equal protection. However, both Rineco and the United States have moved for summary judgment, those motions are ripe for consideration, and Rineco has not come forward with facts to support any of its affirmative defenses. Claims for equitable estoppel do not run against the federal government unless the party claiming estoppel establishes, among other things, that the government engaged in some sort of affirmative misconduct. *Miller v. U.S. Through Farmers Home Admin.*, 907 F.2d 80, 82-83 (8th Cir.1990). To establish a *prima facie* claim of selective prosecution, a party must demonstrate that others similarly situated to it were not prosecuted and that the decision to enforce the law against it was motivated by discriminatory purpose. *United States v. Perry*, 152 F.3d 900, 903 (8th Cir.1998). To establish a viable equal protection claim, Rineco must show that it was treated differently than similarly situated entities for purposes of the challenged government action. *Koscielski v. City of Minneapolis*, 435 F.3d 898, 901 (8th Cir.2006). Rineco has shown no evidence of affirmative misconduct or discriminatory purpose by the United States to support its estoppel and selective prosecution claims, and Rineco has shown no evidence that similarly situated entities received favorable treatment so as to establish a viable equal protection claim. As Rineco has shown no evidence to support these or any other affirmative defenses, summary judgment in favor of the United States is not precluded.²¹

III.

*14 For the foregoing reasons, the Court grants the United States' motion for summary judgment [doc. # 40] as to liability on each of the five claims asserted in its original complaint and denies Rineco's motion for summary judgment [doc. # 13]. This matter will proceed

as to any appropriate civil penalties and as to the three remaining claims in the United States' amended and supplemental complaint.²²

All Citations

Not Reported in F.Supp.2d, 2009 WL 801608

IT IS SO ORDERED.

Footnotes

- 1 The Court deferred ruling on these motions pending a settlement conference before a Magistrate Judge in late October 2008 that proved unsuccessful. Following that settlement conference, the Court, by Order dated November 24, 2008 [doc. # 85], granted a motion of Rineco for leave to file what it claimed to be newly discovered summary judgment evidence. In addition, the Court in that same November 24th Order granted leave of the United States to amend and supplement its complaint to add three additional claims. These additional claims are not addressed in the parties' cross-motions for summary judgment now under consideration.
- 2 Subsequent program revision applications were later approved. *Id.*
- 3 APCEC is the environmental policy-making body for Arkansas and ADEQ implements those policies.
- 4 All paragraph numberings within APCEC Regulation No. 23 are the same as those used in the equivalent Federal Part such that someone seeking, for example, the State equivalent to 40 C.F.R. § 261.3(a)(2)(i) need only refer to APCEC Regulation No. 23 § 261.3(a)(2)(i). Because Arkansas' regulations are substantially identical to EPA's regulations, analysis of the federal scheme can overlay and define that of Arkansas. *Cf. United States v. Power Engineering Co.*, 191 F.3d 1224, 1228 (10th Cir.1999) (determining that because Colorado's regulations are substantially identical to EPA's regulations, analysis of the federal scheme can overlay and define that of Colorado).
- 5 In *Harmon*, the United States Court of Appeals for the Eighth Circuit held that the federal government's right to pursue an enforcement action under RCRA attaches only when a state's authorization is revoked or when a state fails to initiate any enforcement action, and that EPA's practice of overfiling, in those states where it has authorized the state to act, oversteps the federal agency's authority under RCRA. 191 F.3d at 901-02. The Eighth Circuit's decision in *Harmon* concerning EPA's authority to overfile has not been without some criticism. *See, e.g., United States v. Power Engineering Co.*, 303 F.3d 1232 (10th Cir.2002). Such is of no consequence here, however, as the State of Arkansas has not initiated an enforcement action against Rineco concerning the matters before the Court.
- 6 These wastes contain variable levels of ignitability, corrosivity, reactivity, and toxicity, and include arsenic, barium, benzene, cadmium, carbon tetrachloride, chromium, cresol, 1, 4-dichlorobenzene, lead, mercury, wastewater treatment sludge, silver, vinyl chloride, spent halogenated and non-halogenated solvents, spent cyanide, acrylic acid, carbamic acid, DDT, sulfuric acid, toluene, xylene, etc.
- 7 Rineco does not dispute that the TMW is a type of thermal treatment unit (although Rineco states that the TMW does not, as argued by the United States, apply heat to change both the chemical and physical character and composition of the waste fed into the TMW but, rather, that the heat merely breaks the adhesive bonds of the material that are attached to the surface of the metal). Thermal treatment units that do not use internal controlled flame combustion, as the TMW does not, are classified as "miscellaneous units" and subject to the standards for the management of hazardous waste set forth in APCEC Regulation No. 23 Part 264, Subpart X, §§ 264.600-264.603. The United States does not dispute that miscellaneous units may nevertheless be potentially exempt from regulation under RCRA.
- 8 According to the United States, ADEQ's staff, including the Hazardous Waste Division Director, believe that the TMW requires a permit but that Devine took a different position. Devine's April 12th letter does not, however, revoke ADEQ's previous correspondence with the company stating that the agency's conclusion was based on Rineco's compliance with six conditions and, thus, Devine's determination seemingly was made in the context of Rineco's representations of the specific purpose and operation of the TMW.
- 9 Rineco does not dispute that notice of the commencement of this action was given to the State of Arkansas in accordance with 42 U.S.C. § 6928(a)(2).
- 10 APCEC Regulation No. 23 § 261.6(a) provides in part:
 - (a)(1) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of paragraphs (b) and (c) of this section, except for the materials listed in paragraphs (a)(2) and (a)(3) of this section. Hazardous wastes that are recycled will be known as "recyclable materials."

(2) The following recyclable materials are not subject to the requirements of this section but are regulated under subsections C through H of section 266 of this regulation and all applicable provisions in section 270 of this regulation and 40 CFR Part 124:

(i) Recyclable materials used in a manner constituting disposal (subsection C);

(ii) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under subsection O of section 264 or 265 of this regulation (subsection H).

11 APCEC Regulation No. 23 § 261.6(c)(1) provides:

(c)(1) Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of subsections A through L, AA, BB, and CC of sections 264 and 265, and under sections 266, 268, and 270 of this regulation and 40 CFR Part 124, and the notification requirements under section 3010 of RCRA, except as provided in paragraph (a) of this section. (The recycling process itself is exempt from regulation except as provided in § 261.6(d).)

12 Rineco proffers EPA's Revisions to the Definition of Solid Waste, Final Rule, 73 Fed.Reg. 64668-01, October 30, 2008. These revisions are of no help to Rineco, however, as the final rule clarifies that the exclusion for hazardous secondary materials that are legitimately recycled "does not include the recycling of hazardous secondary materials that are ... burned to recover energy or used to produce a fuel or otherwise contained in fuels (40 C.F.R. § 261.2(c)(2))." *Id.* at 64669, 64670, 64710, 64751.

13 Rineco, as previously noted, may not rest on mere allegations or denials of its pleadings, but must come forward with specific facts showing that there is a genuine issue for trial. *Matsushita*, 475 U.S. at 587. See also APCEC Regulation No. 23 § 261.2(f) (respondents in actions to enforce regulations implementing subtitle C of RCRA who raise a claim that certain material is conditionally exempt from regulation must demonstrate that they meet the terms of the exemption; in doing so, they must provide appropriate documentation to demonstrate that the material is exempt from regulation).

14 Citing EPA's RCRA Orientation Manual 2006, Rineco argues that EPA has found that distillation units engaged in the recycling of hazardous spent solvents are exempt recycling units under 40 C.F.R. § 261.6(c)(1) even though the sludge created in the distillation process is sent off-site to BIFs. The RCRA Orientation Manual does not support Rineco's position. As the Manual states, "[n]ot all hazardous wastes pose the same degree of hazard when recycled," and "[w]hile RCRA specifically exempts some wastes when recycled, some recycling processes may still pose enough of a hazard to warrant some degree of regulation." It may be true that EPA has concluded that certain unrefined waste-derived fuels and oils from petroleum refineries may justify exemption from RCRA Subtitle C, but EPA also has concluded that "[t]he process of recycling hazardous waste by burning it for energy recovery may pose significant air emission hazards. Therefore, EPA [has] established specific operating standards for units burning hazardous waste for energy recovery." Rineco, it should be noted, does not treat a single predictable pre-distillation waste stream from a petroleum refinery, but rather more than 400 different types of hazardous waste containing variable levels of ignitability, corrosivity, reactivity, and toxicity.

15 Rineco proffers as "newly discovered evidence" a declaration from Dr. W. Roy Penney, a Professor in the Department of Chemical Engineering at the University of Arkansas, who stated that "complete combustion in the TMW is impossible." Dr. Penney does not, however, conclude that *no* combustion occurs in the TMW and he does not dispute that combustion and destruction occurs in the TOU. Rineco has also proffered a declaration from an attorney, David E. Polter, who essentially opines on the legal issues in this matter. However, the Court will not consider for purposes of today's decision legal opinions that "attempt to tell the court what result to reach." *Dow Corning Corp. v. Safety National Cas. Corp.*, 335 F.3d 742, 751-52 (8th Cir.2003).

16 As indicated in the Patent, "[t]he residual non-condensable vapors are directed to a thermal oxidizer unit through an exhaustor. As is known in the art, the thermal oxidizer unit destroys air toxics and volatile organic compounds ["VOC"] that are discharged."

17 On April 15-16, 2008, David Duster ("Duster"), an environmental scientist with EPA, conducted a RCRA focused compliance evaluation at the Rineco facility and documented that fugitive VOC emissions were escaping from the TMW and other units at the Rineco facility. Similarly, former Rineco employees Tallent, Cummock, and Patty testified to fires occurring at the TMW and to VOCs and particulates that were leaked and discharged from the TMW into the air at the Rineco facility. Rineco points to the testimony of David Crew ("Crew"), ADEQ's on-site inspector, but Crew only testified that "to the best of my knowledge," there has never been a fire in the TMW. Crew did, however, testify that there have been fugitive emission issues with regard to the TMW, and he also testified that the scrap metal is a by-product of the entire process of the TMW, not the primary process, and that he believed and continues to believe that the TMW requires a RCRA permit. Rineco claims the TMW is "designed" for recycling metal, but the possibility of recycling is mentioned only twice in the 13-page Patent, stating first that certain metal (which can be fairly large, e.g. whole cans,

etc.) moving along on a conveyor belt that progresses beyond the field of a magnet "can be recycled or disposed" and, second, that the systems and processes described in the Patent "permit recycling of various materials, which would otherwise not be permitted." The word "disposal," in contrast, is referenced numerous times throughout the Patent, which, as previously noted, "relates generally to waste processing, and more particularly to systems and methods for processing heterogeneous waste materials."

18 Rineco also references EPA's "A Citizen's Guide to Thermal Desorption" ("Guide"), which describes the use of thermal desorption under the supervision of EPA as a method to clean up pollution at Superfund sites stating that "[t]he dust and harmful chemicals are separated from the gases and disposed of safely. The clean soil is returned to the site." Rineco, however, neither returns "clean soil" to its facility nor disposes of the separated materials in a Subtitle C landfill and so the Guide is not applicable.

19 The Court agrees with the United States that the permit requirements apply to the staging area for the toles given that when material is waiting to be placed in the TMW, there are emissions that can occur that would otherwise not be occurring in the absence of the TMW.

20 During oral argument, Rineco acknowledged that the financial assurances argument turns on the exemption issue and that if the Court finds that the TMW is covered under RCRA, which the Court has today so done, then Rineco is required to establish financial assurances for the TMW.

21 Rineco alludes to seeking additional discovery on its affirmative defenses but a party opposing summary judgment who believes that he or she has not had adequate opportunity to conduct discovery must seek relief pursuant to Fed.R.Civ.P. 56(f), which requires that party to show what specific facts further discovery might unveil. *United States v. Casino Magic Corp.*, 293 F.3d 419, 426 (8th Cir.2002) (citations omitted). This, Rineco has failed to do. In addition, during a telephone conference held on November 19, 2008, Rineco agreed that discovery could be stayed until such time as the Court ruled on the parties' cross-motions for summary judgment on liability.

22 As noted in the November 24th Order, the Court will consider for purposes of determining any appropriate civil penalties the seriousness of the violation, any good faith efforts to comply, the harm caused by the violation, any economic benefit derived from noncompliance, the violator's ability to pay, the government's conduct, and the clarity of the obligation involved. *United States v. Ekco Housewares, Inc.*, 62 F.3d 806, 815 (6th Cir.1995). With respect to economic benefit, the Court reiterates that the goal of the economic benefit analysis is to prevent a violator from profiting from its wrongdoing, level the economic playing field, and prevent violators from gaining an unfair competitive advantage. *United States v. Municipal Authority of Union Township*, 150 F.3d 259, 263-64 (3rd Cir.1998) (citation omitted). See also *Pound v. Aerosol Company, Inc.*, 498 F.3d 1089, 1099-1100 (10th Cir.2007) (in determining economic benefit of noncompliance under Clean Air Act ("CAA"), "the better argument" is that "any profits realized through the sale, or offer of sale, of a prohibited product ought to be included when assessing the economic benefit of a CCA violation, the rationale being that one ought not to profit from one's wrongful conduct;" rejecting the argument that "the economic benefit is more properly measured by considering the costs that it would have incurred to comply with the CAA (i.e., the cost of reformulation)"); *Ekco Housewares*, 62 F.3d at 816 (district court did not abuse its discretion in determining that the amount of the RCRA penalty could be based on the economic benefit gained through noncompliance, including cost savings realized by noncompliance, and district court properly considered the deterrence effect not just on defendant but on the regulated community as a whole). Thus, while it may be that the economic benefits calculation ideally begins with the costs that should have been spent to achieve compliance, *Aerosol Company*, 498 F.3d at 1100, the Court will consider all relevant documentation that could lead to a reasonable approximation of economic benefit to Rineco during the period that the TMW has been operating without a permit, including: (1) the cost of applying for and obtaining a RCRA permit; (2) TMW profit from the start of its operation to the present; (3) the pollution control costs associated with the RCRA permit; and (4) other benefits such as any competitive advantage Rineco has obtained by charging generators a lower price to dispose of waste in a non-regulated process.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 Ross Avenue
Dallas, Texas 75202-2733

JUN 24 2016

Mr. Estuardo Silva
Louisiana Department of Environmental Quality
Office of Environmental Services
Waste Permits Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

RE: Draft Hazardous Waste Modified Operating and Post Closure Permit
Chemical Waste Management, Inc.
7170 John Brannon Road
Carlyss, LA 70665
Permit# LAD00077201-OP-RN-MO-1
AI# 742/PER20140007

Dear Mr. Silva:

EPA has the following comments on the draft Hazardous Waste Operating and Post Closure Permit for the Chemical Waste Management, Inc. facility located at 7170 John Brannon Road, Carlyss, LA 70665 (Draft Permit). Chemical Waste Management, Inc. (Chem Waste) seeks to add two oil recovery units (ORUs), two thermal desorber units (TDUs), and 19 associated tanks to its operations at its Carlyss, Louisiana facility. The ORUs will be utilized to separate recoverable oils from drilling fluids, refinery tank bottoms, commercially exempt waste, and other non-hazardous and hazardous waste. The TDUs will treat contaminated tank bottoms, sludge, catalyst slurry oil, and other non-hazardous and hazardous waste. The TDUs will be designed to separate organic constituents from a waste stream by condensing the organic components, which would allow for the recovery or disposal of the contaminants. The non-condensable gases will be routed to a thermal oxidizer unit (TOU). The TDU is proposed to be permitted as a miscellaneous unit.

Condition II.E.25.e of the Draft Permit provides that "[o]ne hundred and eighty (180) days before planned construction, the Permittee must submit finalized engineering specifications and operating parameters for the proposed Thermal Desorber Units to the Administrative Authority for approval. The information submitted must comply with the requirements of this permit and L.A.C. 33:V, Chapter 32, and all applicable regulations." Chapter 32 is entitled "Miscellaneous Units", and is the State equivalent of 40 C.F.R. Part 264, Subpart X. Due to the absence of any proposed engineering specifications, performance test, operating conditions, operating parameters, monitoring and recordkeeping requirements, we have identified permit requirements for the TDU and TOU below that we believe are required by the regulations for operation of the TDU and TOU.

How the TDU and TOU are permitted determine the appropriate permit requirements for the units. The material being treated in the TDU and the TOU is already a hazardous waste. Thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA, 54 Fed. Reg. 50968, 50973 (December 11, 1989). The combustion of the non-condensable gases in the TOU meets the

definition of "thermal treatment" in L.A.C. 33:V.109 [40 C.F.R. § 260.10] and thus requires a RCRA permit. The TOU would meet the definition of incinerator in L.A.C. 33:V.109 [40 C.F.R. § 260.10] (an enclosed device that uses controlled flame combustion). However, rather than permitting the TOU as an incinerator, LDEQ could permit the TDU and TOU together as a miscellaneous unit under L.A.C. 33:V. Chapter 32 [40 C.F.R. Part 264, Subpart X]. If this occurs, then LDEQ is required to include in the permit requirements from L.A.C. 33:V. Chapters 3, 5, 7, 17, 19, 21, 23, 25, 27, 29, 31, 4301.F, H, 4302, 4303 and 4305, all other applicable requirements of L.A.C. 33:V. Subpart 1, and of 40 C.F.R. Part 63, Subpart EEE and 40 C.F.R. Part 146, that are appropriate for the miscellaneous unit being permitted.¹

The decisions as to what appropriate requirements would be included in the permit would be left to LDEQ. However, we believe that the permit conditions would be similar to those set forth in the enclosed Consent Agreement and Final Order, In Re: US Ecology Texas, Inc. and TD*X Associates, LP, EPA Docket Nos. RCRA-06-2012-0936 and RCRA-06-2012-0937, filed October 4, 2012. These permit conditions would include, but not be limited to: 1) a startup, shutdown, and malfunction plan; (2) a performance test, which includes meeting a 99.99% destruction removal efficiency for each principle organic hazardous constituent and meeting certain emission limits; (3) automatic waste feed cutoff system; (4) operating parameters; and (5) investigation, recordkeeping, testing, and reporting requirements. This position was also previously communicated to LDEQ in a letter from EPA to Mr. J. D. Head dated May 2, 2016, in which a copy was sent to LDEQ. A copy of this letter is also enclosed.

If you have any questions, please feel free to call me at (214) 665-8022.

Sincerely,



Susan Spalding
Associate Director
Hazardous Waste Branch (6MM-R)
Multimedia Division

Enclosure

¹ The equivalent Federal provisions are 40 C.F.R. Part 264, Subparts I through O, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146.
40 C.F.R. § 264.601.

**TRADEBE**

At Work

SOLID DISTILLATION SYSTEM

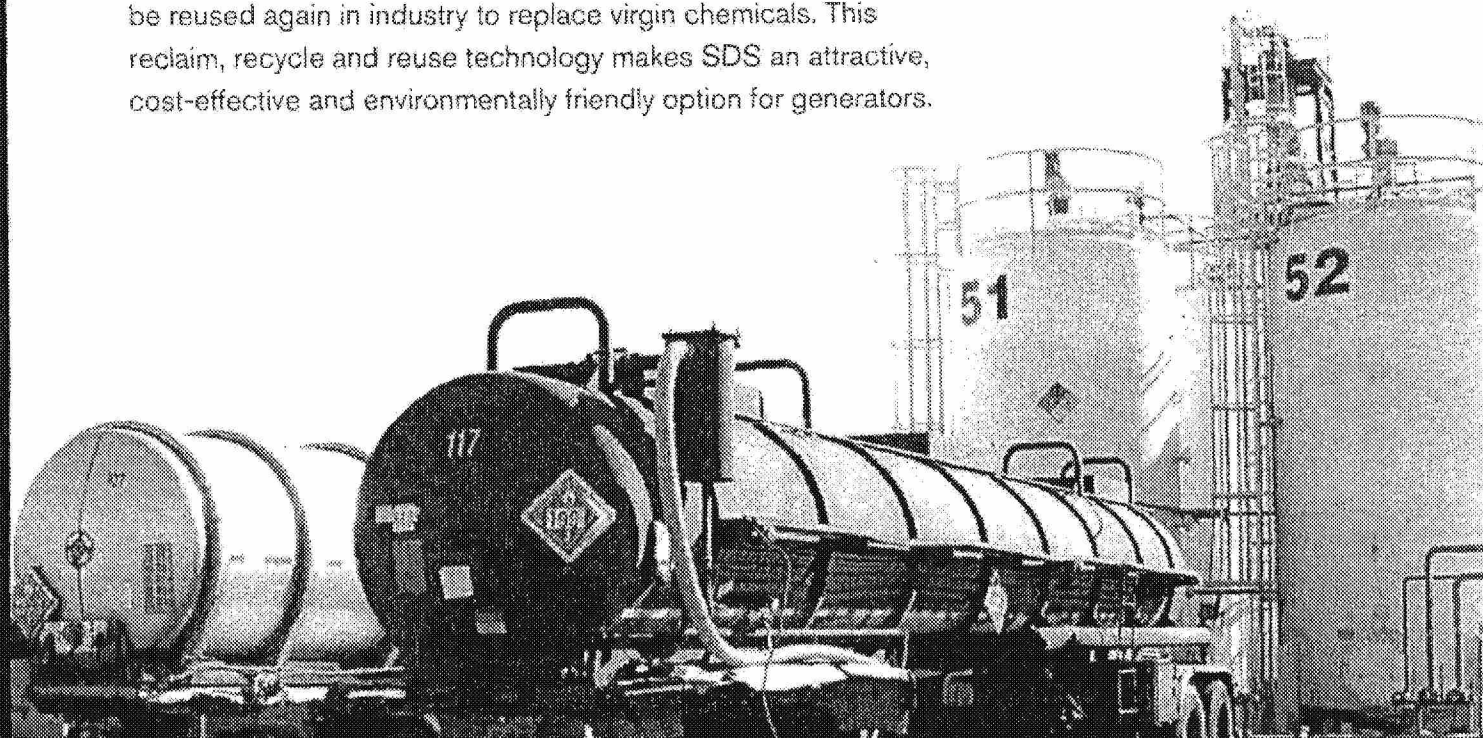


Tradebe's Solid Distillation System (SDS) is a positive step forward in waste recycling technology and a new, cost-effective way for generators to recycle their organic solid waste.

Before SDS, most solid waste was incinerated in a process designed to destroy its hazardous organic content by driving off volatiles and burning excess gases.

After incineration, residual materials were landfilled. Now, SDS offers a more responsible solution. Wastes such as paints, resins, polymers, solvent-soaked rags, and refinery wastes have their hazardous organic content removed and recycled so it can be reused again in industry to replace virgin chemicals. This reclaim, recycle and reuse technology makes SDS an attractive, cost-effective and environmentally friendly option for generators.

SDS is an attractive, cost-effective and environmentally friendly option for generators.



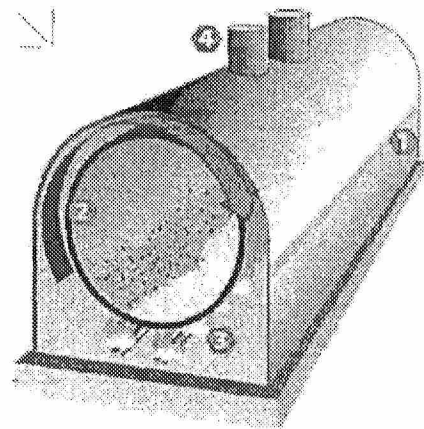
SDS IS UNIQUE FOR FOUR IMPORTANT REASONS

1. Processed material never touches the heat source.
2. Volatile and semi-volatile organics are "baked out" of the waste so they can be reclaimed, distilled and recycled.
3. Tradebe's SDS system is built to handle large volumes of solid waste and work continuously.
4. After processing, a portion of the residual material can be beneficially used in energy recovery.

HOW IT WORKS AND WHY IT'S BETTER

THE SDS THERMAL PROCESSOR CONTAINS FOUR MAIN COMPONENTS.

1. A thermal enclosure that surrounds the entire process
2. A rotating waste processing chamber located inside the thermal enclosure
3. An indirect heating system located under the rotating chamber
4. A heat exhaust system that reclaims and reuses process heat



Shredder

Processed Material

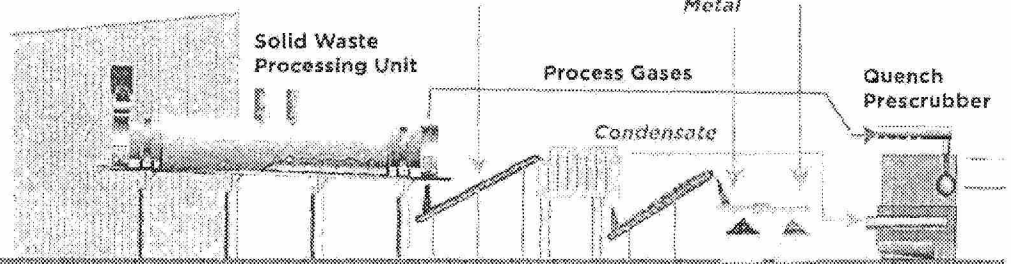
Clean Processed
Scrap Material
Metal

Solid Waste
Processing Unit

Process Gases

Quench
Prescrubber

Condensate





RESPONSIBLE MANAGEMENT, START TO FINISH

The waste typically arrives in metal drums. Tradebe chemists sample and profile each shipment to ensure compatibility with the SDS process.

Once accepted, the drums containing waste are processed through a powerful shredder that reduces everything to a uniform size. The shredded waste is fed into an entry valve at the top of the long, oven-like rotating process chamber. The anaerobic atmosphere inside the process chamber is designed to prevent the oxidation of hydrocarbon components as they are driven from the wastes.

As wastes tumble down the rotating cylinder, they are indirectly heated to very high temperatures; the heat is applied to the outside of the rotating chamber so the material on the inside is never exposed to direct flame.

The high internal temperatures drive all volatile and semi-volatile organic chemicals from the solids. The organic components are collected, condensed, and sent to an oil/water separator as a water/organic mixture to be processed.

While SDS is a fully automated technology, skilled on-site personnel, working from a control center, monitor the process every step of the way to ensure a high quality end product. From the control terminal the operator

can visually monitor and operate every key element in the process.

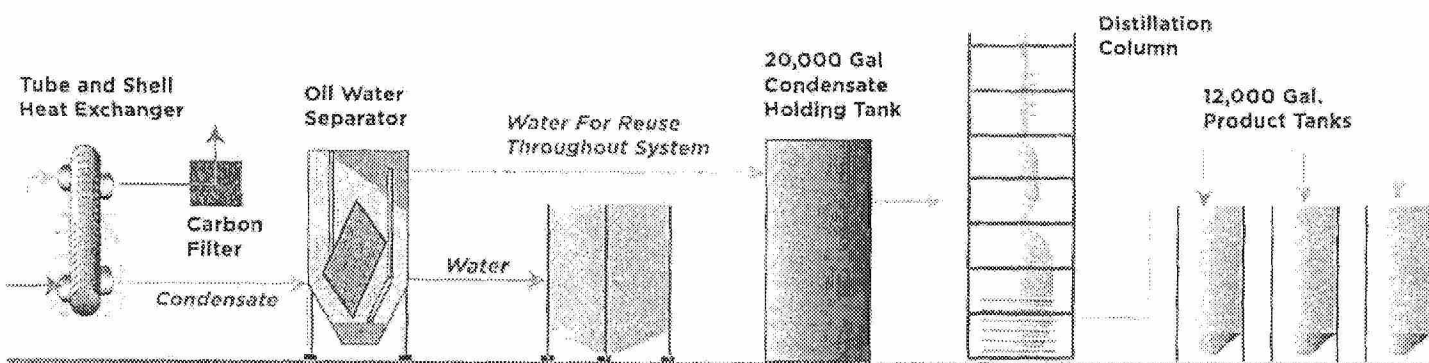
WHAT WASTES CAN BE PROCESSED?

Virtually any organic solid waste can be processed through SDS, including paint waste, solvent soaked rags, resins, polymers, production debris, refinery waste and discarded commercial products, and many more similar wastes.

Once waste is processed through SDS, the generator receives a Certificate of Recycling that affirms the waste has been recycled. The generator then has no further liability. The Certificate of Recycling is also beneficial for generators with ISO 14001 programs and Environmental Management System recycling goals.



Returning potentially hazardous chemicals to industry for reuse, rather than simply wasting their valuable organic content through incineration, is what Tradebe's responsible waste management program is all about. SDS technology achieves waste minimization and recycling goals by transforming waste into valuable recycled products.



SDS BENEFITS

- *SDS can effectively process virtually any solid organic hazardous waste.*
- *SDS helps generators meet Environmental Management Systems objectives.*
- *SDS prevents pollution while promoting recycling and reuse.*
- *SDS helps customers meet US EPA's RCRA Conservation Challenge.*
- *SDS eliminates the release of hazardous constituents into the atmosphere.*
- *SDS conserves energy while keeping waste out of the environment.*
- *SDS reclaims valuable constituents found in solid hazardous waste and reduces the demand for virgin chemicals.*

Solid Distillation System (SDS) is a positive step forward in waste recycling technology. SDS offers customers an effective and cost-efficient method for recycling organic solid waste that might otherwise be incinerated or landfilled. SDS extracts the organics from solid hazardous waste and transforms them into reusable products. SDS recycled products are being beneficially used now in numerous industries throughout the country in place of virgin chemicals.

SDS...
*New technology
for a new world of
waste recycling.*



Sustainability
At Work

TRADEBE

**Tradebe Treatment &
Recycling, LLC**

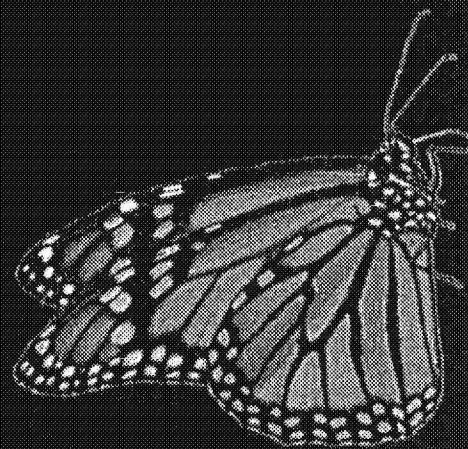
A Division of Tradebe
Environmental Services, LLC

4343 Kennedy Avenue
East Chicago, IN 46312

Toll Free Nationwide
Customer Service:
(800) 388-7242

Northeast Customer Service
and Emergency Response:
(888) 276-0887

www.tradebeusa.com





UNITED STATES ENVIRONMENTAL PROTECT.

REGION 6
1445 Ross Avenue
Dallas, Texas 75202-2733

2 MAY 2016

Mr. J.D. Head
Fritz, Byrne, Head & Fitzpatrick, PLLC
221 West 6th Street
Suite 960
Austin, Texas 78701

Dear Mr. Head:

Thank you for your October 30, 2015 letter requesting clarification of the hazardous waste regulatory standards for thermal desorption units (TDUs) installed at RCRA treatment, storage, and disposal facilities (TSDFs). I apologize for the delay in responding to your request. In your scenario, the TDU reclaims oil from oil bearing hazardous wastes generated by petroleum refining, production, or transportation practices. You describe a TDU as a device that heats solid material to vaporize, remove, and separate organic constituent materials from solids. In the scenario you describe at a TSDF, the separated organic constituents are typically condensed and recovered as a liquid oil. The TDU process also generates a vent gas after the condensing stream.

Your inquiry also references 40 C.F.R. § 261.6(a)(3)(iv)(C)¹, which provides that:

Oil reclaimed from oil-bearing hazardous waste from petroleum refining, production, or transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the used oil specification under 40 C.F.R. § 279.11 is not subject to regulation under 40 C.F.R. Parts 262 – 268, 270, or 40 C.F.R. Part 124, and is not subject to the notification requirements of Section 3010 of RCRA.

If the above conditions are met, then the reclaimed oil can be burned as a non-hazardous fuel. If the oil-bearing hazardous waste is not from petroleum refining, production, or transportation practices, then the reclaimed oil is subject to RCRA regulation.

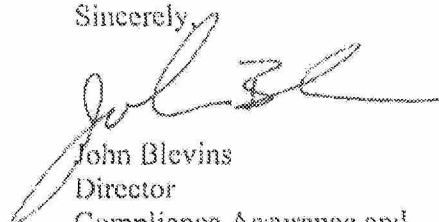
If a TDU combusts all or a portion of the vent gas, combustion of the TDU vent gas from RCRA hazardous waste or recyclable materials [40 C.F.R. § 261.6(a)(1)] is considered thermal treatment that is regulated by RCRA. The material being treated (oil-bearing hazardous waste) is already a hazardous waste. Heating hazardous wastes to a gaseous state is subject to regulation under RCRA as treatment of hazardous waste, and thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA. 54 Fed. Reg. 50968, 50973 (December 11, 1989). Thus, thermal treatment of the vent gas requires a RCRA permit.

¹ Since you did not reference a specific State in which your client may operate a TDU, this letter cites to the applicable federal regulations. If the State has an authorized RCRA program, the corresponding state regulation would be applicable.

If the vent gas is combusted in the combustion chamber of the TDU, then a permit under 40 C.F.R. Part 264, Subpart O is required, because the TDU would meet the definition of incinerator in 40 C.F.R. § 260.10 (an enclosed device that uses controlled flame combustion). If, on the other hand, the vent gas is vented to and combusted in a thermal oxidizing unit (TOU), the permitting authority may be able to permit the entire unit (TDU and TOU) as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X. A RCRA permit would be required even if the facility is operating as a RCRA exempt recycling activity under 40 C.F.R. § 261.6(a)(3)(iv)(C). If the permitting authority decides to issue a 40 C.F.R. Part 264, Subpart X permit, the permitting authority is required to include in the permit requirements from 40 C.F.R. Part 264, Subparts I through O, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146 that are appropriate for the miscellaneous unit being permitted as required in 40 C.F.R. § 264.601. The decisions as to what appropriate requirements would be included in the permit would be left to the permitting authority. However, EPA would expect that the permit conditions would be similar to those set forth in the enclosed Consent Agreement and Final Order, In Re: US Ecology Texas, Inc. and TD*X Associates, LP, EPA Docket Nos. RCRA-06-2012-0936 and RCRA-06-2012-0937, filed October 4, 2012.

If you have any questions, please feel free to contact Guy Tidmore of my staff at (214) 665-3142 or via e-mail at tidmore.guy@epa.gov.

Sincerely,



John Blevins
Director
Compliance Assurance and
Enforcement Division

Enclosure

Cc: Penny Wilson, ADEQ
Lourdes Iturralde, LDEQ
John Kieling, NMED
Mike Stickney, ODEQ
James Gradney, TCEQ

Message

From: Spalding, Susan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=17FB5AB7A65145D4BDE2327FC6D02378-SPALDING, SUSAN]
Sent: 11/13/2017 6:02:44 PM
To: Bob Patton [bob.pattton@tceq.texas.gov]; Atagi, Tracy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ebcfd670077440dfb63a691749f20af2-TATAGI]; Luschek, Robert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cd6769c1089e464ebe6e5f345960a0cf-Luschek, Robert]; Shah, Harry [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=774b35da290741798fca0ed737f707aa-Shah, Harry]
CC: Jones, Bruced [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9026926c877140cbae1d4c0739729813-Jones, Bruced]; Fruitwala, Kishor [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7a19009ba86a4236b97131d5d16f2fae-Fruitwala, Kishor]
Subject: FW: Thermaldyne Meeting Preparation

Sharing the feedback received from Thermaldyne in preparation for our meeting tomorrow.

Susan Spalding, Associate Director
Hazardous Waste Branch
EPA Region 6
(214) 665-8022

From: Kyle Beall [mailto:kyle@beall.law]
Sent: Thursday, November 09, 2017 3:05 PM
To: Spalding, Susan <Spalding.Susan@epa.gov>
Cc: Jones, Bruced <Jones.Bruced@epa.gov>; Fruitwala, Kishor <Fruitwala.Kishor@epa.gov>; jones.bruce@epa.gov
Subject: RE: Thermaldyne Meeting Preparation

Susan,

Thanks for the good questions in anticipation of our meeting on Tuesday. I have provided answers (in bold) below to each question. Please let me know if you need anything further prior to our meeting. We will check in on 7th floor as requested.

We did not find a Channel Refinery – can you be more specific about the facility? **Yes, the “Channel Biorefinery and Terminals” facility is located at 13605 Industrial Road in Houston, Texas. It is located in an industrial park near the Houston Ship Channel. The RN No. in the TCEQ Central Registry is RN101057982.**

Is Thermaldyne only pursuing operations in Texas at this point? Nothing in LA? **Thermaldyne is still pursuing a fixed-site facility in Louisiana and is still working with LDEQ toward that goal.**

Is the facility they are planning to purchase a permitted facility? **Thermaldyne is considering purchasing a petroleum refinery (SIC 2911) such as the Channel refinery referenced above. They are considering other currently-operational facilities (including RCRA-permitted facilities) in Texas as well. The Louisiana option is a green-field facility.**

What is the waste they are planning to treat? We assume it is oil bearing hazardous secondary materials but their draft solid waste permit with LDEQ did include other wastes. **In Louisiana, Thermaldyne is only planning to receive OBHSM (primarily refinery tank bottoms and spent catalyst) generated at petroleum refineries (SIC code 2911). The other materials (e.g., drill cuttings) referenced in the prior solid waste permit filed with LDEQ**

will not be processed or referenced in future permit actions. In Texas, the Channel refinery would be operated as a "topping unit" and also accept OBHSM for processing.

How will they treat the waste? TDU only? **Waste will not be treated at the refinery. OBHSM will be reclaimed via centrifuge and TDU processes. The reclaimed oil will be reinserted back into a refinery process or processed further at the Channel facility. Channel would also be operated as a petroleum refinery. OBHSM would be one (of several) feedstocks processed at the facility.**

We will have EPA HQ on the line and they can provide an update on DSW and the VRE if you are interested. TCEQ will also be on the line. **We are very much interested in an update on the VRE and appreciate the participation of EPA HQ and TCEQ.**

It would also be helpful to know who is attending the meeting in our offices on Tuesday so we can get the names to the security desk. **Kyle Beall, Richard Cates, Brooks Ray will attend on behalf of Thermalayne.**

Kyle

KYLE B. BEALL
ATTORNEY AT LAW

628 North Boulevard
Baton Rouge, LA 70802
tel: 225-336-8450
cel: 225-772-0472

kyle@beall.law

www.Beall.Law

CONFIDENTIALITY STATEMENT

This electronic message contains information from Kyle B. Beall, Attorney at Law, LLC and is confidential or privileged. The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this message is prohibited. If you have received this electronic message in error, please notify us immediately by telephone at (225)336-8450.

From: Spalding, Susan [<mailto:Spalding.Susan@epa.gov>]

Sent: Wednesday, November 08, 2017 2:54 PM

To: Kyle Beall

Cc: Jones, Bruce; Fruitwala, Kishor

Subject: Thermalayne Meeting Preparation

Kyle – we had a few questions in preparation for our meeting next Tuesday. If you can provide answers in advance that would be great.

We did not find a Channel Refinery – can you be more specific about the facility?

Is Thermalayne only pursuing operations in Texas at this point? Nothing in LA?

Is the facility they are planning to purchase a permitted facility?

What is the waste they are planning to treat? We assume it is oil bearing hazardous secondary materials but their draft solid waste permit with LDEQ did include other wastes.

How will they treat the waste? TDU only?

We will have EPA HQ on the line and they can provide an update on DSW and the VRE if you are interested. TCEQ will also be on the line.

It would also be helpful to know who is attending the meeting in our offices on Tuesday so we can get the names to the security desk. Please check in with the 7th floor reception when you arrive. Thanks Kyle.

Susan Spalding, Associate Director
Hazardous Waste Branch
EPA Region 6
(214) 665-8022



Environmental Technology Council

By Certified U.S. Mail

Electronic copy of this letter available at:

<http://etc.org/media/7229/ETC-Letter-to-Cynthia-Giles-re-TDUs.pdf>

1112 16th Street, NW
Suite 420
Washington, DC 20036
Tel: (202) 783-0870
Fax: (202) 737-2038
www.etc.org

July 29, 2016

Ms. Cynthia Giles, Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency (Mail Code 2201A)
1200 Pennsylvania Ave. NW
Washington, DC 20460

Re: Request For A Meeting To Discuss Inconsistent Compliance
For Thermal Desorption Units That Process Hazardous Waste

Dear Ms. Giles:

The Environmental Technology Council, the trade association for the hazardous waste management industry, requests a meeting to discuss inconsistent enforcement and compliance policies being applied by different EPA regional offices to so-called Thermal Desorption Units (TDUs) that are used to thermally destroy hazardous wastes. Due to the significance of this matter, a meeting is requested at your earliest opportunity so that we can discuss measures to better insure enforcement consistency for the hazardous waste industry.

Who we are

The Environmental Technology Council (ETC) is a national trade association whose mission is "to promote the protection of public health and the environment through the adoption of environmentally sound procedures and technologies for recycling and detoxifying industrial wastes and by-products and properly managing and disposing of wastes and waste residues." See www.etc.org. Consistent with this mission, ETC members have a substantial interest in insuring consistency on how environmental compliance requirements are applied within our industry.

Why we've contacted you

ETC understands that the Office of Enforcement and Compliance Assurance (OECA) will address pollution problems that impact American communities through vigorous civil and criminal enforcement that targets the most serious water, air and chemical hazards. As part of this mission, OECA works to advance environmental justice by protecting communities most vulnerable to pollution. Due to the human health risks and environmental justice concerns of burning hazardous wastes in TDUs without a permit under the Resource Conservation and Recovery Act (RCRA), ETC believes that OECA should be briefed on the serious matter.

Who this matter concerns

Tradebe Treatment and Recycling, LLC (“Tradebe”), located at 4343 Kennedy Avenue, East Chicago, Indiana, owns and operates two TDUs that process significant volumes of hazardous waste. Tradebe’s overall operations include hazardous waste fuel blending, lab pack depacking and bulking, tank storage and treatment, and container storage, all of which are subject to RCRA Permit USEPA ID # IND 000646943. However, the two TDUs for thermally destroying hazardous wastes are allegedly “exempted” from the company’s RCRA permit. Tradebe uses the TDUs to treat an extensive list of hazardous wastes such as “paint waste, solvent soaked rags, resins, polymers, plastics, production debris, and discarded commercial chemicals” as advertised in their own sales brochure (Attachment A hereto). As EPA is aware, the term “treatment” is broadly defined in RCRA to include “any method, technique, or process” that is designed to change “the physical, chemical, or biological character or composition of any hazardous waste.” The Tradebe TDUs are engaged in thermal destruction of a significant portion of the hazardous waste feed to those units in addition to desorbing some organic compounds for recovery. By statute and regulation, any “person owning or operating an existing facility ... for the treatment, storage, or disposal of hazardous waste” must have a permit issued under RCRA. 40 C.F.R. § 270.1(b).

Tradebe’s TDUs have a combined total maximum throughput rate of 78,000 tons of hazardous waste per year, which is comparable to a large, commercial RCRA-permitted incinerator.

Inconsistent enforcement between EPA Region 5 and other EPA regional offices

EPA Region 5 has not required Tradebe to include the TDUs within the company’s current RCRA permit and has not taken any enforcement action with respect to the ongoing thermal destruction of hazardous wastes in those units. In contrast, in 2008 EPA Region 6 pursued an enforcement action against Rineco Chemical Industries in Benton, Arkansas, for thermal destruction of hazardous wastes in a TDU without a RCRA permit. The Federal district court agreed with Region 6 and ordered Rineco to obtain a RCRA permit or cease its TDU operations. *United States v. Rineco Chemical Industries, Inc.*, 2009 WL 801608 (E.D. Ark. 2009) (Attachment B). Likewise, EPA Region 6 entered into a Consent Agreement and Final Order with US Ecology Texas, Inc. and TD*X Associates L.P. to require a RCRA permit for thermal destruction of hazardous wastes in a TDU. [https://yosemite.epa.gov/OA/RHC/EPAAdmin.nsf/Filings/77636784A15FA1CC85257E05001BBF43/\\$File/usecology2.pdf](https://yosemite.epa.gov/OA/RHC/EPAAdmin.nsf/Filings/77636784A15FA1CC85257E05001BBF43/$File/usecology2.pdf). Recently, EPA Region 6 submitted comments on a draft RCRA permit for two TDUs to be operated by Chemical Waste Management in Carlyss, Louisiana, confirming that the RCRA permit should include controls similar to a hazardous waste incinerator (Attachment C).

The positions of EPA Region 5 and EPA Region 6 with respect to RCRA permits and enforcement for TDUs that thermally destroy hazardous wastes means that human health and environmental protection depends on the region where a TDU is located, not on consistent EPA enforcement and compliance. The conflicting positions of EPA Region 5 and Region 6 also create an unlevel regulatory program for the hazardous waste industry.

Thermal destruction of hazardous waste in TDUs

There can be no doubt that the Tradebe TDUs are engaged in the thermal destruction of a significant portion of the hazardous waste feed, even if they are also engaged in some recovery of liquid organics through desorption. The fact that the TDUs are used to recover organics does not exempt the thermal destruction of hazardous wastes from RCRA requirements. Thermal destruction is demonstrated by the following:

1. A mass balance of the hazardous wastes fed to the Tradebe TDUs compared to the recovered organics, metal, and other residuals, reveals that a significant volume of waste feed is thermally disposed. The court in *U.S. v. Rineco* used this mass balance test to determine that Rineco's TDU was engaged in unregulated thermal destruction in violation of RCRA. The court used Rineco's own documentation to show that a substantial percentage of waste fed to the unit "was unaccounted for, i.e., disposed of, burned, or incinerated in the treatment process". 2009 WL 801608 at 9. Per Tradebe's own advertising brochure (Attachment A), Tradebe processes 36,000 tons of hazardous waste per year in the TDUs and recovers only 7,000 tons of scrap metal and 10,200 tons of solvent. Even accounting for an estimated 10,000 tons of other residuals, primarily water and char, only 27,000 tons of hazardous waste feed can be accounted for on a mass balance basis. That means that at least 9,000 tons of hazardous waste, or 25% of the waste feed, is thermally destroyed in the TDUs per year without a RCRA permit.
2. There are no controls on the hazardous wastes that are fed to the TDUs, and the feed is not restricted to wastes with recoverable hydrocarbons. According to Tradebe, the TDUs can accept a broad range of hazardous wastes including paint waste, rags, resins, polymers, plastics, production debris, and discarded commercial chemicals. Many other types of hazardous wastes are available on-site and no permit or other restrictions apply to the waste feed. It is essential for a RCRA-regulated thermal treatment facility to restrict the composition of the feed so that emissions of hazardous chemical compounds do not exceed prescribed emission limits. A RCRA permit is required so that appropriate feed limits can be established for the TDUs. This is particularly important because, while some of these wastes may yield organics for recovery, the remaining waste materials are thermally destroyed in the TDUs' heated rotating drums, while non-condensable gases are burned in flares that are an integral part of the disposal operation.
3. There are no operating parameter limits on temperature, oxygen, or other conditions to assure that emissions are controlled. Tradebe claims that the TDUs are operated in an "anaerobic atmosphere," but there are no permit limits or other restrictions on oxygen concentration and no public monitoring reports. EPA has stated in technical papers that oxygen levels in thermal desorption units must be maintained at less than 2 percent to limit combustion *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites, Chapter VI: Low-Temperature Thermal Desorption* (EPA 510-B-95-007). Only through the engineering review and comprehensive performance testing that are part of a RCRA permit can appropriate operating parameter limits (OPLs) be established for the TDUs to assure

continuing compliance with emission limits. Currently no permit limits or other regulatory controls address these parameters.

4. The fact that the TDUs produce a large volume of char demonstrates that RCRA-regulated thermal destruction is occurring. EPA asserted in the Rineco case, and the court agreed, that the fact that the Rineco TDU produced a residual char for disposal “indicates that the destruction of organic materials takes place” *U.S. v. Rineco*, 2009 WL 801608 at 9. Likewise, the Tradebe TDUs produce a substantial volume of char, which alone is conclusive evidence that thermal destruction of hazardous wastes is occurring. According to a state inspection report, Tradebe generates approximately 10 to 13 roll-offs of char from the TDUs per week depending upon operations. IDEM Inspection Report (Jan. 7, 2016), IDEM Doc. # 80205392. The char itself must be classified as a hazardous waste under EPA’s derived-from rule because it is generated from the treatment and disposal of listed hazardous wastes. 40 CFR §261.3(c). Therefore, the char must meet the treatment standards in 40 CFR Part 268 applicable to the hazardous wastes that are thermally destroyed in the TDUs prior to land disposal in a RCRA-permitted landfill. Based upon information and belief, Tradebe disposes of char at landfills without meeting the treatment standards and land disposal prohibitions of RCRA.
5. The TDUs vent non-condensed hazardous waste gases to flares for combustion as an integral part of their operation, classifying the entire unit as RCRA-regulated thermal treatment. A significant portion of the gas stream from processing hazardous wastes in the TDUs is not recovered, but instead is directed as a non-condensed gas to flares where it is burned. The flares are enclosed devices that use “controlled flame combustion” to destroy organics and therefore are engaged in incineration. The Tradebe TDUs are designed to intentionally drive volatile gases off the hazardous waste and then use the flares as an integral part of the process to combust those gases which are non-condensable. That is different from other units (e.g., tanks) that use flares to control gases which are incidental and not deliberately formed as a primary element of their operation. The court in *U.S. v. Rineco* found that venting of vapor/inerts to a similar TDU constituted “burning and incineration” in violation of RCRA. 2009 WL 801608 at 9. No emission limits for hazardous air pollutants, such as dioxin/furans, hydrochloric acid, mercury and other listed toxic metals apply to the Tradebe TDUs’ flare emissions. In fact, Tradebe’s Title V Permit only requires that the flares achieve a destruction and removal efficiency (DRE) of 98 percent. RCRA regulations, on the other hand, require that the incineration of hazardous wastes achieve a DRE of 99.99%. 40 CFR § 264.343(a)(1). Thus, the Tradebe TDUs may emit hazardous air pollutants at an amount more than two orders of magnitude greater than regulatory standards and a RCRA permit would allow.

Based on all the foregoing, Tradebe is engaged in the RCRA-regulated thermal destruction of hazardous wastes in the TDUs, and the land disposal of residual char that is a derived-from hazardous waste, in violation of the permitting requirements, air emission standards, and regulatory conditions of RCRA.

Tradebe's TDUs do not qualify for the "recycling process" exemption

Contrary to Tradebe's customer brochures, the TDUs do not qualify for the exemption from RCRA regulations as a "recycling process" under 40 CFR § 261.6(c)(1). First, even assuming the exemption was available for the recovery of organics, the exemption cannot extend to the aspect of the TDU operation that involves the thermal destruction of hazardous wastes. Some recovery of organics does not mean that the substantial treatment and thermal destruction of hazardous wastes in the TDUs is exempt from RCRA permit requirements.

This is exactly what the court ruled in the Rineco case. The court found that the Rineco TDU did not qualify for the recycling exemption in § 261.6(c)(1) "because substantial hazardous wastes that are treated in the [unit] are destroyed by thermal treatment and not recycled in the [unit]." 2009 WL 801608 at 8. The court cited EPA's own explanation in a regulatory preamble:

[W]e wish to clarify that materials being burned in... thermal treatment devices... are considered to be abandoned by being burned or incinerated under §261.2(a)(1)(ii), whether or not energy or material recovery also occurs.... In our view, any such burning ... is waste destruction subject to regulation either under Subpart O of Part 264 or Subpart O and P of Part 265. If energy or material recovery occurs, it is ancillary to the purpose of the unit – to destroy wastes by means of thermal treatment – and so does not alter the regulatory status of the device or the activity [2009 WL 801608 at 8, quoting 48 Fed. Reg. 14472, 14484 (1983) (internal quotes omitted)].

As described above, at least 25 percent of the hazardous waste feed to the Tradebe TDUs is disposed by thermal treatment, and "any such burning" is RCRA-regulated thermal treatment that does not qualify for the § 261.6(c)(1) exemption.

Second, a major part of Tradebe's business is the blending and processing of hazardous wastes into fuels for burning in cement kilns. Tradebe itself admits that the oil, char, and other residuals from the TDUs are directed into their fuel blending operations. For example, Tradebe's brochures states: "After processing [in the TDUs], a portion of the residual material can be beneficially used in energy recovery." Tradebe Brochure, Attachment D, p.2. However, EPA's regulations are clear that hazardous wastes are not subject to the recycling exemption but are regulated under RCRA permit requirements when "burned for energy recovery in boilers and industrial furnaces [BIFs]" 40 CFR §261.6(a)(2). Because Tradebe processes hazardous wastes in the TDUs and then uses the residuals to produce fuels that are "burned for energy recovery" in cement kilns, the exemption from RCRA permitting for recycling operations is not available.

This was another major holding in the Rineco case. The court carefully analyzed the regulatory language in § 261.6, finding that "recyclable materials, i.e., hazardous wastes burned for energy recovery in BIFs" are not subject to the recycling process exemption, "but instead are regulated under Subparts C through H of Part 266." 2009 WL 801608 at 6. Under Subpart H, "[o]wners and operators of facilities that store or treat hazardous waste that is burned in a boiler or industrial furnace are subject to the applicable provisions of Sections 264, 265, and 270 of this

regulation.” *Id.* The Subpart H regulations provide that “[t]hese standards apply to storage and treatment by the burner as well as to storage and treatment facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner.” *Id.* (emphasis added).

Just like Rineco, Tradebe is an intermediary fuel blender that treats hazardous wastes in the TDUs that are then blended and burned for energy recovery in BIFs. Therefore, the exemption set forth in §261.6(c)(1) for recycling processes is inapplicable to Tradebe.

As the court ruled in the Rineco case, a contrary ruling would mean:

[A]ny hazardous waste treatment unit that processed an incidental amount of recovered material that is not burned for energy recovery would qualify for the recycling exemption. Such an interpretation is contrary to the regulations and RCRA’s purpose to ensure the proper treatment, storage and disposal of hazardous waste so as to minimize the present and future threat to human health and the environment” 2009 WL 801608 at 8.

EPA Region 6 Determination Letter

The Rineco case resulted from an enforcement action taken by EPA Region 6. In addition, EPA Region 6 recently issued a letter of clarification on May 2, 2016, regarding the hazardous waste regulatory standards for TDUs installed at RCRA treatment, storage and disposal facilities (TSDFs) (Attachment E). This letter states in part:

If a TDU combusts all or a portion of the vent gas, combustion of the TDU vent gas from RCRA hazardous waste or recyclable materials [40 C.F.R. §261.6(a)(1)] is considered thermal treatment that is regulated by RCRA. The material being treated (oil-bearing hazardous waste) is already a hazardous waste. Heating hazardous wastes to a gaseous state is subject to regulation under RCRA as treatment of hazardous waste, and thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA. 54 Fed. Reg. 50968, 50973 (December 11, 1989). Thus, thermal treatment of the vent gas requires a RCRA permit.

If the vent gas is combusted in the combustion chamber of the TDU, then a permit under 40 C.F.R. Part 264, Subpart O is required, because the TDU would meet the definition of incinerator in 40 C.F.R. §260.10 (an enclosed device that uses controlled flame combustion). If, on the other hand, the vent gas is vented to and combusted in a thermal oxidizing unit (TOU), the permitting authority may be able to permit the entire unit (TDU and TOU) as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X. A RCRA permit would be required even if the facility is operating as a RCRA exempt recycling activity under 40 C.F.R. §261.6(a)(3)(iv)(C). If the permitting authority decides to issue a 40 C.F.R. Part 264, Subpart X permit, the permitting authority is required to include in the

permit requirements from 40 C.F.R. Part 264, Subparts I through O, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146 that are appropriate for the miscellaneous unit being permitted as required in 40 C.F.R. §264.601.

In short, the Region 6 letter clearly states that TDUs which are combusting all or a portion of the TDU vent gas are required to obtain a RCRA permit for such treatment units, and they are required to comply with the HWC MACT in addition to other standards.

Previous efforts to obtain EPA review and action

This letter is not the first attempt that we have made to prompt EPA into enacting a consistent compliance policy towards TDUs like the Tradebe units. In 2006, ETC submitted letters to the Indiana Department of Environmental Management (IDEM) and EPA Region 5 objecting to the apparent RCRA-exempt recycling status of the initial TDU at the Tradebe facility (then operated by Pollution Control Industries, Tradebe's predecessor corporation). In 2010, ETC again submitted a letter to EPA Region 5 seeking a determination on PCI's claim that the TDU was an exempt unit. During 2014, ETC learned that Tradebe was installing a second TDU and in 2015 ETC submitted adverse comments to Region 5 and IDEM on their draft air permit modification which would allow the new TDU to operate. IDEM issued a final air permit modification approval to Tradebe, ignoring ETC's comments, and Region 5 issued its decision in support of IDEM's approval. Consequently, on June 12, 2015, ETC filed a Clean Air Act petition under 40 CFR § 70.8 with Region 5, objecting to the issuance of the air permit modification to Tradebe. To date, more than a year later, EPA Region 5 has not responded to the ETC petition.

Notice of intent to file a RCRA Citizen Suit

After greater than 10 years, ETC is now running out of options to encourage Region 5 to regulate the Tradebe TDUs in a manner consistent with other hazardous waste processing TDUs (i.e., insure they are RCRA permitted and comply with the HWC MACT standards). A legal option that ETC has considered is to submit a citizen suit notice letter under RCRA, 42 U.S.C. § 6972(a), of intent to file suit against the Administrator for failure to perform her non-discretionary duties and against Tradebe for violation of the requirement to obtain a RCRA permit for treatment and disposal of hazardous wastes in its TDUs. Last year the Hoosier Environmental Council (HEC), an environmental group in Indiana, conducted the first comprehensive assessment of environmental justice in the East Chicago, Indiana, region where the Tradebe facility is located, documenting that the community has "long suffered a hugely disproportionate share of Indiana's pollution burden" *Assessment of Environmental Justice Needs In Northern Lake County Communities*, <http://www.hecweb.org/wp-content/uploads/2010/04/HEC-Assessment-of-EJ-Needs-in-Northern-Lake-County-Communities-FINAL-REPORT2.pdf>, at p. 6. If the Tradebe TDUs were required to obtain a RCRA permit, the East Chicago community would have an opportunity for their environmental justice concerns to be taken into account pursuant to EPA's published guidance on consideration of environmental justice in permitting.

In an attempt to avoid the need to pursue a RCRA citizen suit, ETC is now requesting a meeting with you and your senior staff as a final measure in the hopes of trying to initiate concrete actions that would bring Tradebe into the same permitting and regulatory compliance protocols that other commercial TDUs must meet.

In conclusion, I intend to follow-up with you to set up the requested meeting so that we can discuss actions that will resolve our concerns, while ensuring a consistent compliance policy by EPA with regards to hazardous waste TDUs.

Respectfully submitted,



David Case
Executive Director and General Counsel
Environmental Technology Council
1112 16th Street, N.W., Suite 420
Washington, DC 20036
(202) 783-0870 ext. 201
Email: dcase@etc.org

SOLIDS DISTILLATION SYSTEM (SDS)

Attachment A

About SDS Technology

TRADEBE's Solids Distillation System (SDS), is a positive step forward in sustainable waste recycling technology.

SDS offers generators an effective and cost-efficient method for recycling organic solid waste that might otherwise be disposed of.

Prior to SDS technology, most organic hazardous waste solids were incinerated in a process designed to destroy the organic content by driving off volatiles and burning excess gases.

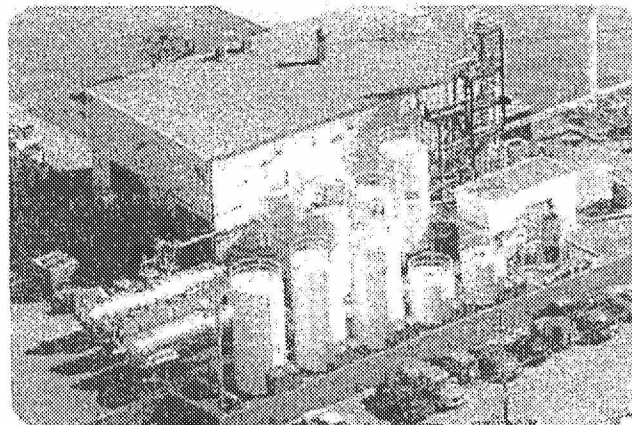
Alternatively, SDS extracts the organics from hazardous waste solids to recover a viable product.

SDS recycled products are used now in numerous industries throughout the US in place of virgin chemicals.

SDS is a multi-stage process including waste container conveyance and shredding, indirect thermal desorption, scrap metal recycling and distillation of recovered organic liquids.

Wastes suitable for SDS include:

- Paints, Resins, Polymers
- Solvent-soaked bags and other
- Organic liquids



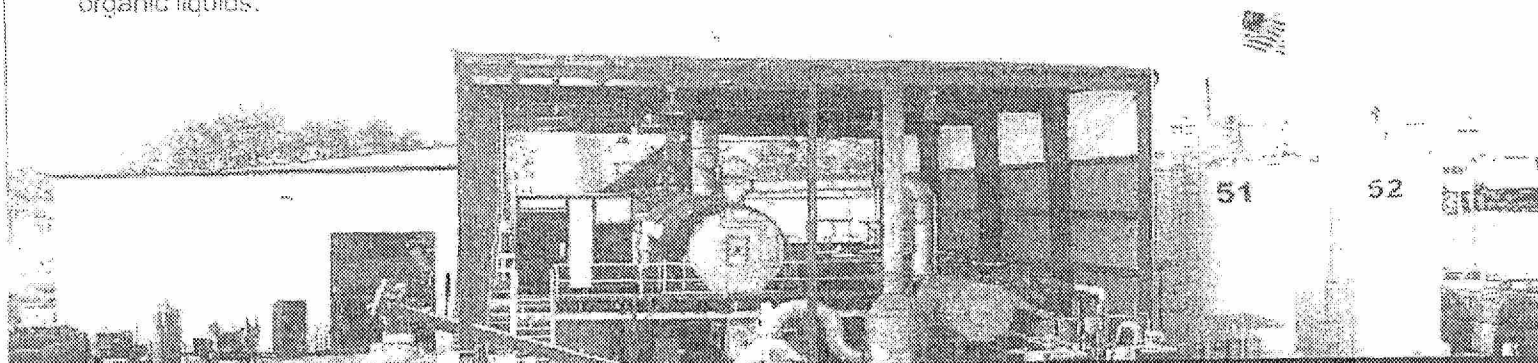
TRADEBE's SDS operations in East Chicago, IN



TRADEBE introduced the original SDS technology in 2004 to address the growing need for recycling of hazardous wastes.

Due to growing demands of the industrial waste market, TRADEBE designed and built a second SDS unit during 2014-2015. This additional unit is SDS².

SDS² enhanced technology, with new safety standards, offers the same environmental benefits as the original SDS unit; with twice the capacity to produce a quality reclaimed product.



Contact Details:

Phone: (800) 388-7242 Nationwide
(888) 276-0887 Northeast & 24-hour Emergency Response

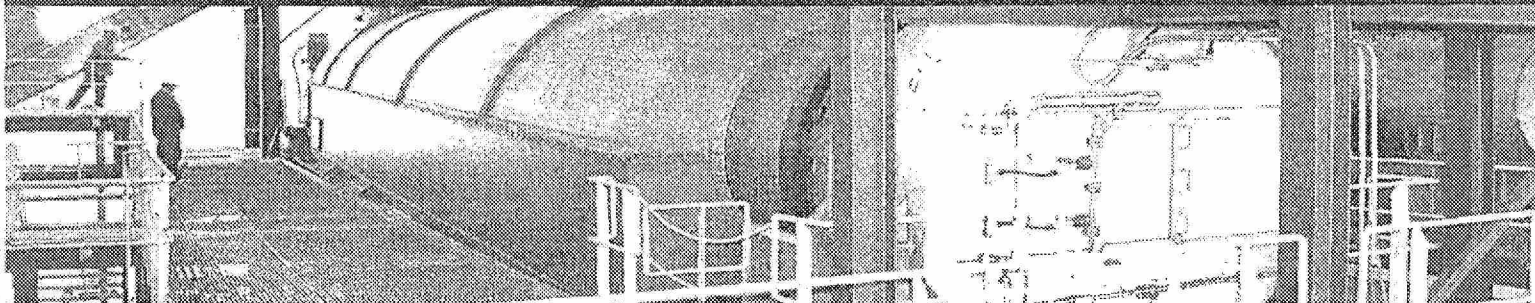
Email: us.cs@tradebe.com Web: www.tradebeusa.com



TRADEBE

Sustainability at Work

SDS² - Sustainable Waste Recycling



SDS² Benefits

True Recycling Technology

The hazardous waste processed through SDS is recycled - receiving the waste management handling code H020, Solvents Recovery (distillation, extraction); and may be eligible for recycling credits with state regulatory agencies.

Versatility

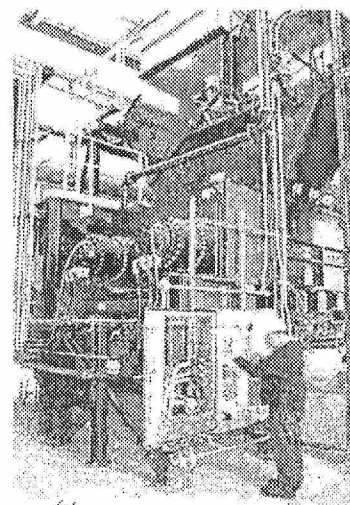
Waste can be received in various size containers from small cans to cubic yard boxes. Metal, plastic and fiber drums are processed with equal efficiency, eliminating costly and potentially unsafe handling and repackaging on site at generator locations.

Reliability

With the addition of the SDS² unit, the SDS total production capacity has increased from 12,000 tons per year to 36,000 tons per year.

SDS² Facts

- ✓ SDS promotes recycling, reclamation and reuse.
- ✓ SDS reclaims valuable constituents found in solid hazardous waste and reduces the demand for virgin chemicals.
- ✓ SDS conserves energy while keeping waste out of the environment.

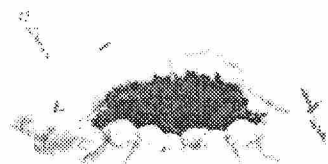


SDS Annual Stats

Scrap Metal Reclaimed : 7,000+ Tons

Solvents Recycled for Reuse : 2,750,000+ Gals

SDS Haz Waste Received & Processed : 36,000+ Tons



Scan to Watch SDS Now >



How are we doing?

Please visit us online to take our client satisfaction survey:
www.tradebeusa.com/survey



TRADEBE

Sustainability at Work

2009 WL 801608

Only the Westlaw citation is currently available.
United States District Court,
E.D. Arkansas,
Western Division.

UNITED STATES of America, Plaintiff,
v.
RINECO CHEMICAL
INDUSTRIES, INC., Defendant.

No. 4:07cv001189 SWW.

March 4, 2009.

West KeySummary

1 Environmental Law

Permits, Licenses, and Approvals

Hazardous waste facility through its activities in recycling metals that contained hazardous waste materials was not eligible for the recycling process exemption and the facility was, therefore, operating in violation of the Resource Conservation and Recovery Act ("RCRA") by its failure to obtain the required permit. The facility argued that because the material it recycled was metal and the metal was never burned for energy recovery that the regulation did not apply. However, a substantial percentage of oil and char resulting from the metal reclamation process was blended into hazardous waste derived fuel ("HWDF") and sold to boiler and industrial furnaces ("BIFs") where it was burned for energy recovery. Thus, the facility was considered an intermediary fuel blender that was subject to the permit requirements of the RCRA. Solid Waste Disposal Act, § 3005(a), 42 U.S.C.A. § 6925(a); APCEC Regulation No. 23, §§ 261.6 (a) and (c), 270.1.

Cases that cite this headnote

Attorneys and Law Firms

Richard Gladstein, Ronald J. Tenpas, Anita M. Scott, U.S. Department of Justice, Environmental Enforcement, Washington, DC, Terry Sykes, U.S. Environmental Protection Agency, Dallas, TX, for Plaintiff.

Heather M. Corken, Jeffrey D. Palmer, Fulbright & Jaworski, Houston, TX, Kevin A. Crass, Friday, Eldredge & Clark, LLP, Little Rock, AR, for Defendant.

MEMORANDUM AND ORDER

SUSAN WEBBER WRIGHT, District Judge.

*1 The United States of America brings this civil action against Rineco Chemical Industries, Inc. ("Rineco") under the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§ 6901 *et seq.* The United States seeks injunctive relief and civil penalties against Rineco for violations of RCRA Sections 3005(a) and 3010, 42 U.S.C. §§ 6925(a) and 6930, and Arkansas Pollution Control and Ecology Commission ("APCEC") Regulation No. 23, which incorporates federal regulations approved by the Environmental Protection Agency ("EPA") pursuant to RCRA that are part of the federally-enforceable State hazardous waste program relating to the generation, transportation, treatment, storage, handling, and disposal of hazardous waste.

Now before the Court are cross-motions of the parties for summary judgment [doc. # 's 13, 40] to which responses and replies have been filed. The Court held a hearing on these motions at the request of Rineco on September 4, 2008, and the matter is now ripe for decision. For the reasons that follow, the Court grants the United States' motion for summary judgment [doc. # 40] and denies Rineco's motion for summary judgment [doc. # 13].¹

I.

A.

RCRA is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid waste. *Meghrig v. KFC Western, Inc.*, 516 U.S. 479, 483, 116 S.Ct. 1251, 134 L.Ed.2d 121 (1996) (citation omitted).

RCRA's primary purpose is to reduce the generation of hazardous waste and to ensure the proper treatment, storage, and disposal of that waste which is nonetheless generated "so as to minimize the present and future threat to human health and the environment." *Id.* (quoting 42 U.S.C. § 6902(b)).

RCRA's Subtitle C, 42 U.S.C. §§ 6921 *et seq.*, establishes a "cradle-to-grave" regulatory system for the treatment, storage and disposal of hazardous wastes. *Cement Kiln Recycling Coalition v. E.P.A.*, 493 F.3d 207, 211 (C.A.D.C.2007) (citations and internal quotation marks omitted). This system operates through a combination of national standards established by EPA regulations, and a permit program in which permitting authorities—either EPA or states that have hazardous waste programs authorized by EPA—apply those national standards to particular facilities. *Id.*

Permits are generally required under RCRA for any facility that engages in the treatment, storage, or disposal of hazardous waste. *United States v. Manning*, 434 F.Supp.2d 988, 998 (E.D.Wash.2006). Section 3005(a) of RCRA, 42 U.S.C. § 6925, establishes a case-by-case permitting process. *Cement Kiln Recycling Coalition*, 493 F.3d at 211-12. Section 3005(a) directs EPA to promulgate regulations requiring each person owning or operating an existing facility that engages in the treatment, storage, or disposal of hazardous waste, or planning to construct a new facility that engages in the treatment, storage, or disposal of hazardous waste to have a permit pursuant to this section. *Id.* at 212 (quoting 42 U.S.C. § 6925(a)). Pursuant to Section 3005(a), EPA promulgated regulation 40 C.F.R. § 270.1(b), which provides that "[s]ix months after the initial promulgation of the part 261 regulations [Identification and Listing of Hazardous Waste], treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a RCRA permit is prohibited." *See also United States v. Heuer*, 4 F.3d 723, 730 (9th Cir.1993) ("It is fundamental that an entity which performs a hazardous waste activity for which a permit is required under RCRA may not legally perform that activity unless it has a permit for the relevant activity").

*2 As indicated previously, pursuant to RCRA subsection 3006(b), EPA may authorize a state to administer and enforce its own hazardous waste program, so long as the state program is equivalent to and consistent

with EPA's program and provides adequate compliance and enforcement measures. 42 U.S.C. § 6926(b). When a state obtains such authorization, the state hazardous waste program operates "in lieu" of the federal program. *Id.*

The State of Arkansas received final authorization to enforce its hazardous waste program on January 25, 1985. 40 C.F.R. § 272.201(a).² The Arkansas Department of Environmental Quality ("ADEQ") is the state agency primarily responsible for carrying out this authority in the State of Arkansas.³ During the time Arkansas has been authorized to administer the RCRA hazardous waste program, facilities in that state have been regulated under the provisions of APCEC Regulation No. 23, which has adopted and incorporated verbatim from the federal RCRA regulations.⁴

Despite having authorized a state to act, EPA frequently files its own enforcement actions against suspected environmental violators, even after the commencement of a state-initiated enforcement action (a process known as overfiling). *Harmon Indus., Inc. v. Browner*, 191 F.3d 894, 898 (8th Cir.1999).⁵ Before initiating any such action, however, RCRA requires that EPA give the authorized state prior notice. RCRA Section 3008(a)(2), 42 U.S.C. § 6928(a)(2).

B.

Rineco owns and operates a facility in Benton, Arkansas that is engaged in the generation, treatment, and storage of hazardous waste. Rineco is the largest single-site hazardous waste fuel blending facility in the United States and receives more than 400 different types of listed and characteristic solid phase and liquid phase hazardous wastes at its facility from a large number of generators of hazardous waste.⁶

Rineco applied for and obtained a permit to operate a hazardous waste management facility at its Benton facility, RCRA Permit No. 28H-M001. Located at this facility is a Thermal Metal Wash Recycling Unit ("TMW"). The TMW is protected by Rineco Patent No. 7,341,155 B2 ("Patent"), which "relates generally to waste processing, and more particularly to systems and methods

for processing heterogeneous waste materials." As noted in the Patent,

[i]ndustry produces large amounts of waste that must be processed and disposed of by waste operators. Most of this waste is heterogeneous waste, which includes liquids and solids, which is friable and non-friable, which melts at various temperatures, has various solidification temperatures, low auto-ignition temperatures, and high vapor pressure. The waste material also includes ferrous and non-ferrous metals in a wide range of sizes. This waste is often categorized by applicable environmental regulations as "hazardous waste" because of its flammable, corrosive, or toxic nature. Thus, the disposal of such waste is heavily regulated by environmental regulations.

*3 There are inefficiencies associated with currently-available processes for disposing of industrial waste. Thus, a heretofore unaddressed need exists in the industry for systems and methods of processing waste materials.

The original TMW began operation in June 2003 and ceased operation in July 2004. The current TMW commenced operation in March 2005. The operation of both the original and the new TMW are similar, the main difference being, states Rineco, that the external heat source for the original TMW was natural gas while the external heat source for the new TMW is electricity and circulating hot oil.

The operation of the TMW, which does not have a RCRA permit, is at the center of the United States' claims in this action. The United States claims the primary purpose of the TMW is to convert a chemical soup of hazardous waste streams into hazardous waste derived fuel ("HWDF") for sale to boiler and industrial furnaces ("BIFs"), an activity it claims requires a RCRA permit. Rineco, however, claims the TMW is designed to recycle metal from hazardous and non-hazardous materials, an activity it claims is exempt from regulation and does not require a RCRA permit.

Prior to constructing the TMW at its facility, Rineco inquired of ADEQ concerning the TMW's permitting requirements. By letter dated January 10, 2003, ADEQ informed Rineco that it had made a regulatory determination regarding the TMW based on the following assumptions:

- The unit's intended purpose is to recycle metal contaminated with hazardous waste and recover scrap metal from Rineco's waste stream.
- No scrap metal from this unit will be blended into Rineco's fuel or otherwise disposed. The scrap metal will be recycled.
- The waste entering the auger contains metal contaminated with hazardous waste.
- The hazardous waste/constituents leaving the process will be handled properly as hazardous waste.
- The auger used in the process does not grind the hazardous waste entering the system; the auger only moves the waste stream.
- This unit is not intended to decontaminate containers.

ADEQ stated that "[b]ased on these assumptions, the processing unit does not require a permit, at this time" but that "the hopper may be considered a storage unit requiring a permit if the waste stream remains in the hopper for any period of time." *Id.* ADEQ went on to state that "[t]his determination is based on information submitted by Rineco for this specific unit for a specific use; the exemption does not apply to a different unit or may not apply if this unit is not utilized as intended, and in accordance with the above assumptions." *Id.*

On February 21, 2003, ADEQ sent a letter to Rineco clarifying at the request of Rineco its position on "scrap metal contaminated with hazardous waste." ADEQ stated that scrap metal, in and of itself, is exempt from hazardous waste regulation. However, ADEQ also stated "when scrap metal is mixed with non-scrap metal material (*i.e.* listed or characteristic hazardous waste), the mixture would not be considered a scrap metal and the entire mixture would be subject to regulation."

*4 By letter dated July 20, 2004, ADEQ informed Rineco that it had reason to believe that the TMW was

not being operated in a manner that conforms to a regulatory based exclusion from hazardous waste management permitting. Based on the information gathered during our investigation and observations we find that the material being processed in the unit is a mixture of hazardous waste and shredded metal.